MLP36n / MLP31n
P7035n / P7031n
LP136n / LP131n
Afício SP 4110N / SP 4100N

Operating Instructions

Hardware Guide

Read this manual carefully before you use this machine and keep it handy for future reference. For safe and correct use, be sure to read the Safety Information before using the machine.

Introduction

This manual contains detailed instructions and notes on the operation and use of this machine. For your safety and benefit, read this manual carefully before using the machine. Keep this manual in a handy place for quick reference.

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Copying or printing the following items is generally prohibited by local law:
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The preceding list is meant as a guide only and is not inclusive. We assume no responsibility for its completeness or accuracy. If you have any questions concerning the legality of copying or printing certain items, consult with your legal advisor.

Important

Contents of this manual are subject to change without prior notice. In no event will the company be liable for direct, indirect, special, incidental, or consequential damages as a result of handling or operating the machine.

Two kinds of size notation are employed in this manual. With this machine refer to the inch version.

For good print quality, the supplier recommends that you use genuine print cartridges from the supplier.

The supplier shall not be responsible for any damage or expense that might result from the use of parts other than genuine parts from the supplier with your office products.

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* The product name of Windows® 95 is MicrosoftR Windows® 95.
* The product name of Windows® 98 is MicrosoftR Windows® 98.
* The product name of Windows® Me is MicrosoftR Windows® Millennium Edition (Windows Me).
* The product names of Windows® 2000 are as follows:
    Microsoft® Windows® 2000 Professional
    Microsoft® Windows® 2000 Server
    Microsoft® Windows® 2000 Advanced Server
* The product names of Windows® XP are as follows:
    Microsoft® Windows® XP Home Edition
    Microsoft® Windows® XP Professional
* The product names of Windows Server® 2003 are as follows:
    Microsoft® Windows Server® 2003 Standard Edition
    Microsoft® Windows Server® 2003 Enterprise Edition
    Microsoft® Windows Server® 2003 Web Edition
* The product names of Windows Server® 2003 R2 are as follows:
    Microsoft® Windows Server® 2003 R2 Standard Edition
    Microsoft® Windows Server® 2003 R2 Enterprise Edition
    Microsoft® Windows Server® 2003 R2 Web Edition
* The product names of Windows NT® 4.0 are as follows:
    Microsoft® Windows NT® Workstation 4.0
    Microsoft® Windows NT® Server 4.0

Some illustrations in this manual might be slightly different from the machine.
Certain options might not be available in some countries. For details, please contact your local dealer.

TABLE OF CONTENTS

5. Paper and Other Media

6. Replacing Consumables and Maintenance Kit

7. Cleaning the Printer

8. Adjusting the Printer

9. Troubleshooting

10. Removing Misfed Paper

11. Appendix

Positions of ⚠WARNING and ⚠CAUTION labels

This machine has labels for ⚠WARNING and ⚠CAUTION at the positions shown below. For safety, please follow the instructions and handle the machine as indicated.

AUB050S

①	**WARNING ATTENTION WARNUNG AVVISO AVISO ADVERTENCIA 警告** ⚠ ● Do not incinerate toner or toner containers. Toner dust may cause flashback when exposed to an open flame. ● Ne pas incinérer les cartouches ni les boîtes de cartouches de toner. Exposée à une flamme nue, la cendre de toner peut provoquer un retour de flamme. ● Verbrennen Sie keinen Toner oder Tonerkartusche. Tonerstaub kann beim kontakt mit offenem Feuer explodieren. ● Non gettare il toner o i contenitori del toner sul fuoco. La polvere del toner si può incendiare dalla fiamma. ● No incinere el tóner ni los contenedores de tóner. El polvo de tóner puede inflamarse al ser expuesto al fuego. ● Não exponha o Toner ou a sua embalagem ao fogo. O pó de Toner poderá explodir quando exposto a chama viva. ● トナー又はトナーの入った容器を直接焼却炉等の火中に投入しないでください。火傷をするおそれがあります。	Do not incinerate toner or toner containers. Toner dust may cause flashback when exposed to open flames.
②		The inside of this printer becomes very hot. Do not touch parts with this label (indicating a hot surface). Touching these parts will result in burns.
③		The inside of this printer becomes very hot. Do not touch parts with this label (indicating a hot surface). Touching these parts will result in burns.

5

④	CAUTION PRECAUCIÓN ⚠ ●High temperature. ●Alta temperatura. ACHTUNG ATTENZIONE ●Hohe Temperatur. ●Temperatura elevata. ATTENTION 高温注意 ●Température élevée. ●高温になっています。	The inside of this printer becomes very hot. Do not touch parts with this label (indicating a hot surface). Touching these parts will result in burns.

Manuals for This Printer

For particular functions, see the relevant parts of the manual.

Safety Information

Provides information on safe usage of this machine.

To avoid injury and prevent damage to the machine, be sure to read this.

Quick Installation Guide

Contains procedures for removing the printer from its box, connecting it to a computer, and installing its driver.

Hardware Guide (This manual)

Contains information about paper and procedures such as installing options, replacing consumables, responding to error messages, and resolving jams.

Software Guide

Contain procedures for using this machine in a network environment, utilizing the software, and using security functions.

How to Read This Manual

Symbols

This manual uses the following symbols:

⚠ WARNING

Indicates important safety notes.

Ignoring these notes could result in serious injury or death. Be sure to read these notes. They can be found in the "Safety Information".

⚠ CAUTION

Indicates important safety notes.

Ignoring these notes could result in moderate or minor injury, or damage to the machine or to property. Be sure to read these notes. They can be found in the "Safety Information".

⭐ **Important**

Indicates points to pay attention to when using the machine, and explanations of likely causes of paper misfeeds, damage to originals, or loss of data. Be sure to read these explanations.

⬇ **Note**

Indicates supplementary explanations of the machine's functions, and instructions on resolving user errors.

🅕 **Reference**

This symbol is located at the end of sections. It indicates where you can find further relevant information.

[ ]

Indicates the names of keys that appear on the machine's display.

[ ]

Indicates the names of keys on the machine's control panel.

Description for the Specified Model

In this manual, the following items explain about the printer for the specified models:

| 220-240V |

This explains about the 220-240 V model printer.
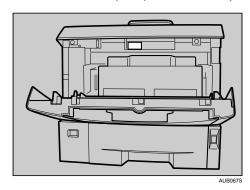
Read if you purchase this model.

| 120V |

This explains about the 120 V model printer.

Read if you purchase this model.

⬇ Note

- You can identify the printer's model by checking the label on its inside as shown.

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Installing the Operating Instructions

Follow the instructions in the HTML Operating Instructions Manuals that are provided on the "Manuals" CR-ROM.

⭐ Important

- System Requirements :
    - Windows 95/98/Me, Windows 2000/XP, Windows Server 2003/2003 R2 or Windows NT4.0.
    - 800 × 600 or higher monitor resolution.
- Web Browser Requirements :
    - Microsoft Internet Explorer 5.5 SP2 or higher
    - Firefox 1.0 or higher

1. **Quit all applications currently running.**
2. **Insert the CD-ROM "Manuals" into the CD-ROM drive.**

    The installer starts.
3. **Select an interface language and the model type you want to use, and then click [OK].**
4. **Click [Install manuals] or [Install HTML Manuals].**

    220-240V

    If you want to read manuals from CD-ROM, click [Read manuals].
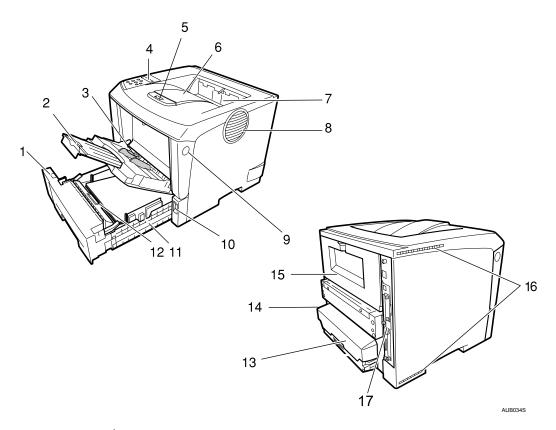
    120V

    If you want to read manuals from CD-ROM, click [Read HTML Manuals] or [Read PDF Manuals].
5. **Follow the instructions on the screen to complete the installation.**
6. **Click [Finish] when the installation is completed.**
7. **Click [Exit].**

🔽 Note

- Auto Run may not work under certain operating system setting. If this is the case, copy all data on the CD-ROM root directory to your hard disk drive, and then launch "Setup.exe" to start the installation.
- To uninstall the Operating Instructions Manual, select [Programs] in the [Start] menu, select your printer driver, and then click [uninstall]. You can uninstall each Operating Instructions separately.
- If you are using an unsupported Web browser and the simpler version of the Operating Instructions Manual does not display correctly, open the folder "MANUAL_HTML\LANG\ (language)\(manual name) \unv\" on the "Manuals" CD-ROM, and then double-click on "index.htm".

1. Guide to the Printer

Exterior

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1. **Paper Size Dial**

   Adjust this dial to match the size and feed direction of the paper loaded in the paper tray.

2. **Bypass Tray Extension**

   Pull out this extension to load paper into the Bypass Tray when its length is longer than B5.

3. **Bypass Tray**

   Use this tray to print onto thick paper, OHP transparencies, adhesive labels, envelopes as well as plain paper. When printing on custom paper size, printer driver settings are required.

   Up to 100 sheets of plain paper (80 g/m^2, 20 lb.) can be loaded.

   See p.75 "Paper and Other Media Supported by This Printer" and p.85 "Loading Paper".

4. **Control Panel**

   Contains keys for the printer operation and display that shows the printer status.

5. **Tray Extension**

   Pull out this extension when paper's length is longer than B5.

1

6. **Output Tray (Standard Tray)**

   Stacks printed output with the print side facing down.

7. **Paper Exit Cover**

   Open this cover to remove misfed paper.

8. **Ventilator**

   Helps to keep components inside the printer from overheating.

   Do not block or obstruct this hole. A malfunction may occur due to overheating.

9. **Front Cover Release Button**

   Use this button to open the front cover.

10. **Power Switch**

    Use this switch to turn the printer power on and off.

11. **Paper Tray (Tray 1)**

    Loads up to 500 sheets of plain paper (80 g/m^2, 20 lb.) into this tray for printing.

    The paper tray is displayed with "Tray 1" on the display.

12. **Friction pad**

    This is provided to feed one sheet of paper at a time. Clean the friction pad when more than one sheet of paper is fed into the printer. Also, replace the friction pad when the message "Replace Maintenance Kit", appears.

13. **Paper Tray Cover**

    Prevents paper inside the tray from getting dirty.

14. **Power Port**

    Connect the power cable to this port and the other end of the cable to the outlet.

15. **Rear Cover**

    Remove this cover to install the optional duplex unit or to replace the fusing unit.

16. **Ventilators**

    Help to keep components inside the printer from overheating.

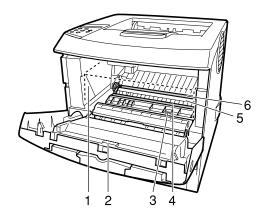   Do not block or obstruct these holes. A malfunction may occur due to overheating.
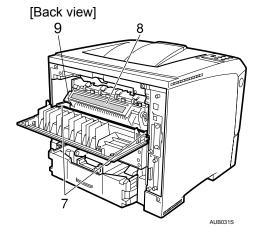
17. **Controller Board**

    Slide it out to install the optional memory unit.

    Plug cables such as the ethernet cable, USB cable and parallel interface cable and into their connectors.

Inside

[Front view]

[Back view]

AUB031S

1. **Toner Cartridge (Print Cartridge)**

   Includes toner and a photo conductor unit.

   When "Replace Print Cartridge" appears on the display, replace this unit.

2. **Front Cover**

   Open this cover when accessing the inside of the printer.

3. **Guide Board**

   Open this board to remove misfed paper.

4. **Registration Roller**

   Feeds the paper. If it becomes dirty, clean it.

   See p.129 "Cleaning the Printer".

5. **Transfer Roller Cover**

   Open this cover when replacing a transfer roller.

6. **Transfer Roller**

   When "Replace Maintenance Kit" appears on the display, replace this roller.

7. **Fusing Unit Lock Levers**

   Lift these levers when replacing the fusing unit.
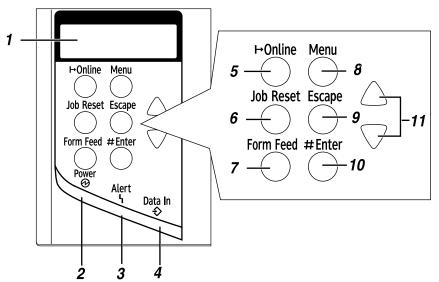
8. **Fusing Unit**

   Fuses the image onto paper.

   When "Replace Maintenance Kit" appears on the display, replace this unit.

9. **Envelope lever**

   Use this lever if envelopes become wrinkled during printing. Using the envelope lever can improve print quality.

Control Panel

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1. **Display**

   Shows the current status of the printer and error messages.

2. **Power indicator**

   Is on while the printer power is on.

   Is off when the power is turned off or while the printer is in Energy Saver mode.

3. **Alert indicator**

   Blinks or lights up whenever any printer error occur. A message describing the cause of the error also appears on the display.

4. **Data In indicator**

   Blinks while the printer is receiving data from a computer.

   Is on if there is data to be printed.

5. **[Online] key**

   Press this key to switch the printer between online and offline.

6. **[Job Reset] key**

   When the printer is online, press this key to cancel any ongoing print jobs.

   See "Canceling a Print job", Software Guide.

7. **[Form Feed] key**

   If the printer is offline, press this key to print all the data left in the printer's input buffer.

   This does not work if the printer is online.

8. **[Menu] key**

Press this key to make and check the current printer settings.

9. **[Escape] key**

Press this key to return to the previous condition on the display.

10. **[# Enter] key**

Press this key to execute menu items selected on the display.

Press this key to clear some errors.

11. **[▲] [▼] keys**

Press keys to increase or decrease values on the display when making settings.

Keep the key pressed to quicken scrolling, and increase or decrease values on the display in units of 10.

2. Installing Options

Available Options

This section describes how to install options.

By installing options, you can improve the printer performance and have an expanded variety of features to use.

⚠ CAUTION

- Before installing options, the machine should be turned off and unplugged for at least an hour. Components inside the machine become very hot, and can cause a burn if touched.

- Before moving the machine, unplug the power cable from the outlet. If the cable is unplugged abruptly, it could become damaged. Damaged plugs or cables can cause an electrical or fire hazard.

- When lifting the machine, use the grips on both sides. The machine could break or cause an injury if dropped.

⭐ Important

- The voltage rating of the connector for options is 24 V DC or less.

Option List

The following is a list of options for this printer.

- Paper Feed Unit TK1030
- Envelope Feeder Type 400
- AD1000 (Duplex Unit)
- Memory Unit Type C 128MB/ 256MB
- IEEE 802.11b Interface Unit
- Gigabit Ethernet Board Type A
- Hard Disk Drive Type 2650
- VM Card Type D
- Data Storage Card Type A

Option Installation Flow Chart

Installing multiple options in the following order is recommended:

2

1. **Attach the paper feed unit (Paper Feed Unit TK1030).**

   Attach the paper feed unit to the bottom of the printer.

   You can attach up to two paper feed units. Up to 1600 sheets of paper can be loaded.

2. **Attach the envelope feeder (Envelope Feeder Type 400).**

   Replace the paper tray of the optional feeder with the envelope feeder.

3. **Take out the controller board from the printer.**

4. **Remove all the SDRAM module before installing the hard disk drive.**

5. **Install the hard disk drive (Hard Disk Drive Type 2650).**

   Install the hard disk drive to the controller board.

6. **Install the SDRAM module (Memory Unit Type C 128MB/ 256MB).**

   Install the module to the SDRAM module slot on the controller board.

   There are three types of memory unit: 128 MB and 256 MB.

7. **Install the IEEE 802.11b interface unit, or the Gigabit Ethernet board.**

   Install one of these options into the vacant expansion slot (on the left) of the controller board.

   The followings can be installed:

   - IEEE 802.11b Interface Unit
   - Gigabit Ethernet Board Type A

   Do not install more than one option. These options do not function simultaneously.

8. **Install the VM card (VM Card Type D) or the data storage card (Data Storage Card Type A).**

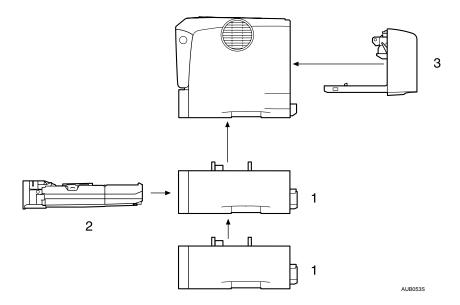   Insert these units into the SD card slot on the controller board.

9. **Attach the AD1000 (duplex unit).**

   Attach the duplex unit to the rear of the printer.

Installing Options

Install options in the positions shown in the illustration.

Exterior

AUB053S

1. **Paper Feed Unit TK1030 (Tray 2 or Tray 3)**

    You can load up to 500 sheets (60-130 g/m^2, 16-34 lb.) of plain paper into the tray.

    See p.22 "Attaching Paper Feed Unit TK1030".

2. **Envelope Feeder Type 400**

    You can load up to 60 envelopes (72-90 g/m^2, 19-24 lb.) into the tray.

    See p.25 "Attaching Envelope Feeder Type 400".

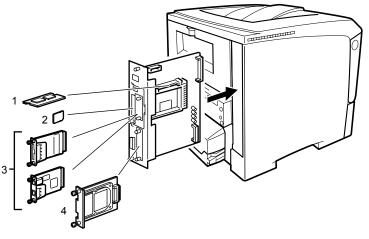3. **AD1000 (duplex unit)**

    You can print on both sides of paper.

    Install the duplex unit by removing the rear cover of the printer.

    See p.42 "Attaching AD1000 (Duplex Unit)".

✦Note

- Up to two Paper Feed Units TK1030 can be attached.

- The upper optional paper feed unit is displayed with "Tray 2", and the lower unit is displayed with "Tray 3" on the display.

- The Envelope Feeder is a tray that slides into the optional paper feed unit. Without the optional paper feed unit, the Envelope Feeder cannot be used.

- Your printer can accommodate two optional paper feed units. The envelope feeder unit can be used in "Tray 2" and "Tray 3". The main unit's feed tray (Tray 1) cannot be used for this purpose.

Interior

AUB055S

1. **Memory Unit Type C 128MB/ 256MB (SDRAM module)**

   Install 128 MB or 256 MB SDRAM module into the controller board slot.

   See p.29 "Attaching Memory Unit Type C 128MB/256MB (SDRAM Module)"

2. **Optional cards**

   See p.40 "Attaching Optional Cards".

3. **Optional boards**

   See p.33 "Attaching IEEE 802.11b Interface Unit".

   See p.37 "Attaching Gigabit Ethernet Board Type A".

4. **Hard Disk Drive Type 2650**

   See p.27 "Attaching Hard Disk Drive Type 2650".

🔽**Note**

- You cannot install following options at the same time:
  - IEEE 802.11b Interface Unit
  - Gigabit Ethernet Board Type A

Caution when re-installing the controller board

This section describes handling the controller board when installing options.

If you slide out the controller board to install units, carefully read the instruction to re-install the controller board.

⭐ **Important**

- The following may occur if the controller board is not properly installed:

  - all control panel indicators are lit.

  - no control panel indicators is lit.

  - the error message appears on the display.

2
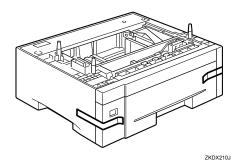
Attaching Paper Feed Unit TK1030

When installing multiple options, install the paper feed unit first.

⚠CAUTION

- Before moving the machine, unplug the power cord from the outlet. If the cord is unplugged abruptly, it could become damaged. Damaged plugs or cords can cause an electrical or fire hazard.

- When lifting the paper feed unit, hold the bottom of it, and then lift it slowly. Lifting it carelessly or dropping it may cause an injury.

- The printer weighs about 17 kg (37.5 lb.). When lifting the machine, use the inset grips on both sides. Otherwise the printer could break or cause injury if dropped.

⭐**Important**
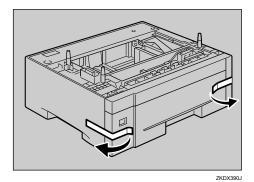
- Do not slide out more than one paper tray at a time. Fully extending more than one full tray at a time can cause the machine to topple over.

- Check the printer nameplate to confirm the model code.

- Before using the new paper feed unit, you must make settings in the printer driver.

1. Check the package contains the following:

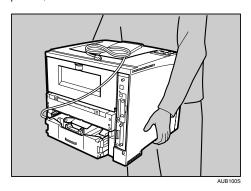   **Paper Feed Unit (including a paper tray)**

ZKDX210J

2. Turn off the power of the printer, and then unplug the printer's power cable and the interface cable.
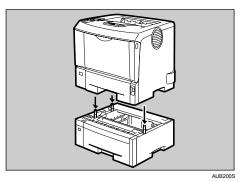
3. **Remove the adhesive tape from the paper feed unit.**

ZKDX390J

4. **Align the holes over the pins, and then lower the printer gently onto the paper feed unit.**

   There are three pins on the top of the paper feed unit that point straight up. On the bottom of the printer, there are three holes.

AUB100S

AUB200S

5. **Attach the interface cable to the printer.**

6. **Plug the printer's power cord back into the wall outlet, and then turn on the power.**

🔽 **Note**

- After finishing installation, you can check whether the paper feed unit is properly installed: Print the configuration page from the [List/Test Print] menu. If it is installed properly, you will see "Paper Feed

23

Unit (Tray 2)" or "Paper Feed Unit (Tray 2)", "Paper Feed Unit (Tray 3)" for "Connection Equipment" on the configuration page.

- If the paper feed unit is not installed properly, reinstall it from the start. If you cannot install it properly even after attempting reinstallation, contact your sales or service representative.

- To attach two paper feed units at the same time, first stack them one upon the other, and then attach them as a single unit.

🔖 **Reference**

- "Printing the Test Page", Quick Installation Guide.

- p.85 "Loading Paper"

- p.141 "Adjusting Tray Registration"

Attaching Envelope Feeder Type 400

⭐ **Important**
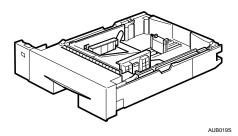
- Do not slide more than plural paper tray out at once. Having plural full paper trays fully extended could cause the machine to topple.

- The tray of the upper optional paper feed unit (Tray 2) is beneath the standard paper tray (Tray 1).

- Your printer can accommodate two optional paper feed units. The envelope feeder unit can be used in "Tray 2" and "Tray 3". The main unit's feed tray (Tray 1) cannot be used for this purpose.
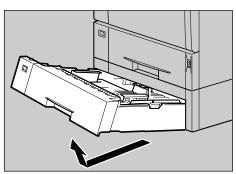
The following explanation uses the example of installing the envelope feeder unit in "Tray 2".

1. **Check the package contains the following:**

   Envelope Feeder

   AUB019S
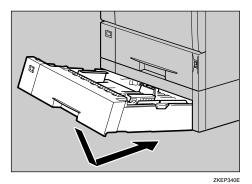
2. **Pull out the optional paper tray (Tray 2) of the optional paper feed unit until it stops. After that, lift it slightly, and then pull it out.**

   ZKEP330E

3. **Lift the front of the envelope feeder, and slide it carefully into the paper feed until it stops.**

ZKEP340E

⬇️**Note**

* This unit is a tray that slides into the optional paper feed unit. Without the optional paper feed unit, this Envelope Feeder cannot be used.

* Keep the removed paper tray with paper in a cool dark place.

🔖**Reference**

* p.85 "Loading Paper"
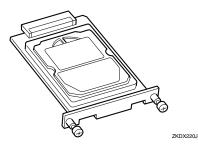
Attaching Hard Disk Drive Type 2650

⚠CAUTION

- Do not touch the inside of the controller board compartment. Doing so may cause a machine malfunction or a burn.

★Important
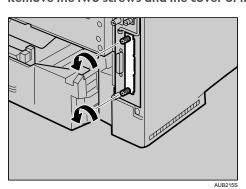
- Before touching the hard disk drive, touch something metal to discharge any static electricity. Static electricity can damage the hard disk drive.

- Do not subject the hard disk drive to physical shocks.

- Before using the new hard disk drive, be sure to make the settings in the printer driver.

1. **Check the package contains the following:**

   Hard Disk Drive
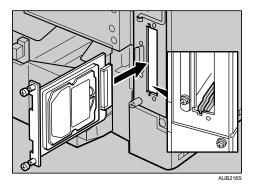
   ZKDX220J

2. **Turn off the power of the printer, and then unplug the power cable.**

3. **Remove the two screws and the cover of the hard disk drive mounting bracket.**
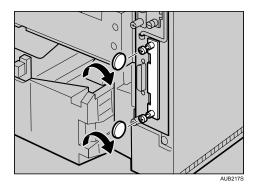

   AUB215S

   The removed screws and cover are not used when installing the hard disk drive.

4. **Slowly insert the hard disk drive while aligning it with the top and bottom rails in the printer until it stops.**

AUB216S

5. **Fasten the two screws to fix the hard disk drive.**

AUB217S

⬇️Note

- Use a coin or similar object if the screws do not turn easily.

- After finishing installation, you can check whether the hard disk drive is properly installed: Print the configuration page from the [List/Test Print] menu. If it is installed properly, you will see "Hard Disk Drive" for "Device Connection" on the configuration page.

- If the Hard disk drive is not installed properly, repeat the procedure from the start. If you cannot install it properly even after reinstallation, contact your sales or service representative.

📑Reference

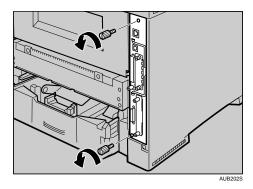- "Printing the Test Page", Quick Installation Guide.

Attaching Memory Unit Type C 128MB/ 256MB (SDRAM Module)

⚠ CAUTION

- Do not touch the inside of the controller board compartment. Doing so may cause a malfunction or a burn.
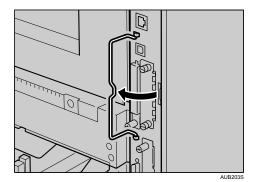
⭐ **Important**

- Before touching the memory unit, ground yourself by touching something metal to discharge any static electricity. Static electricity can damage the memory unit.

- Do not subject the memory unit to physical shocks.

- Before using the new memory unit, Be sure to make settings in the printer driver.

- Remove the default SDRAM module (64 MB) before installing the optional SDRAM module.

1. **Turn off the power of the printer, and then unplug the power cable and interface cable.**

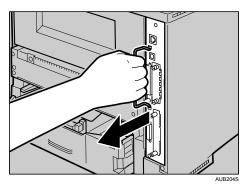2. **Remove the two screws holding the controller board in place.**

AUB202S

The removed screws are required in fastening the controller board.

3. **Pull out the handle of the controller board.**

AUB203S

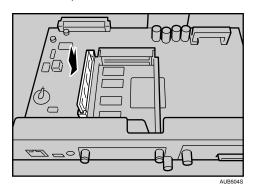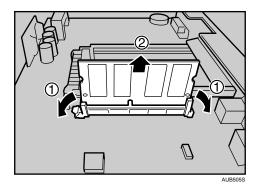**4.** **Pull the handle, and then slide the controller board out.**

AUB204S

5. **Place the controller board on a flat surface.**
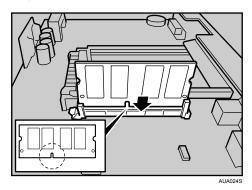
The Memory Unit is installed in the slot shown in the illustration below.
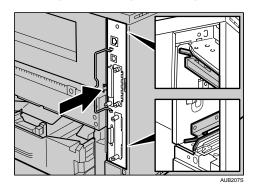

AUB504S

6. **Replacing the default SDRAM module, press down the levers on both sides (①) to remove the default module (②).**
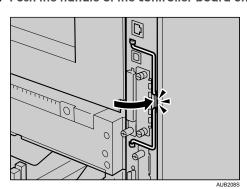

AUB505S

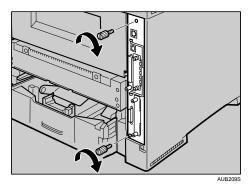7. **Align the notch of the SDRAM module to the slot, and then push it down until it clicks.**

AUA024S

2

8. **Match the controller board to the top and bottom rail using the "▼" mark, and then slide it into the printer slowly until it stops.**

AUB207S

9. **Push the handle of the controller board until it clicks.**

AUB208S

10. Fasten the controller board to the printer with the two screws.

AUB209S

🔽**Note**

- Use a coin or similar object if the screws do not turn easily.

- After finishing the installation, you can check the memory unit is properly installed: Print the configuration page from the [List/Test Print] menu. If it is installed properly, the memory capacity will appear under "Total Memory" on the configuration page.

- The table below shows the total SDRAM module capacities.

Standard	Extended	Total
128 MB[*1]	128 MB	256 MB
128 MB[*1]	256 MB	384 MB

- [*1] Value when the default SDRAM module (64 MB) is removed

- If the memory unit is not properly installed, repeat this procedure. If you cannot install it properly even after reinstallation, contact your sales or service representative.

- Install the controller board carefully to prevent any malfunction.

🔗**Reference**

- "Printing the Test Page", Quick Installation Guide.
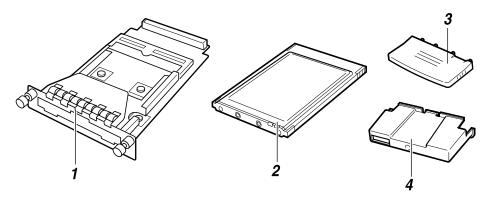
Attaching IEEE 802.11b Interface Unit

⚠️CAUTION

- Do not touch the inside of the controller board compartment. Doing so may cause a machine malfunction or a burn.

⭐**Important**

- Before handling the IEEE 802.11b interface board, ground yourself by touching something metal to discharge any static electricity. Static electricity can damage the IEEE 802.11b Interface board.

- Do not subject the 802.11b interface unit to physical shocks.
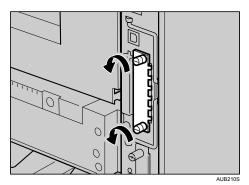
1. **Check the package contains the following:**

   IEEE 802.11b Interface Unit

AUB247S

   1. **Interface Unit**
   2. **Card**
   3. **Antenna**
   4. **Antenna Cap**

2. **Turn off the power of the printer, and then unplug the power cable and the interface cable.**

3. **Remove the two screws and the cover of the IEEE 802.11b interface unit mounting bracket.**
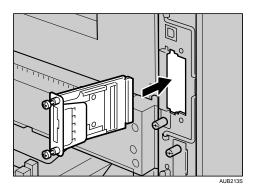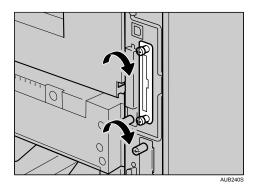

AUB210S

The removed cover is not used when installing the IEEE 802.11b interface unit. Keep it for possible future use.

4. **Attach the IEEE 802.11b interface unit.**

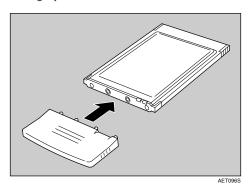Insert the end of the IEEE 802.11b interface unit into the slot.

AUB213S

5. **Fasten the IEEE 802.11b interface unit to the controller board with the two screws.**
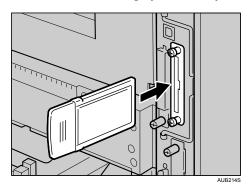

AUB240S

Check the IEEE 802.11b interface unit is connected firmly to be controller board.
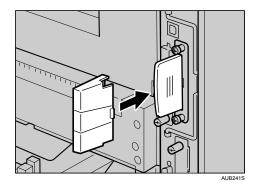
6. **Attach the antenna to the card with the label facing down and the uneven side of the antenna facing up.**

AET096S

7. **Insert the card slowly into the interface unit with the label facing down and the uneven black antenna surface facing up until it stops.**

AUB214S

8. **Attach the antenna cap to the card with the side that has both corners of the antenna cap cut out facing the screws.**

AUB241S

⬇Note

- Use a coin or similar object if the screws do not turn easily.

2

- After finishing installation, you can check the IEEE 802.11b interface unit is properly installed: Print the configuration page from the [List/Test Print] menu. If it is installed properly, "IEEE 802.11b" will appear for "Device Connection" on the configuration page.

- If the IEEE 802.11b interface unit is not installed properly, reinstall it following this procedure. If you cannot install it properly even after attempting reinstallation, contact your sales or service representative.

- You need to make settings with the control panel before using the IEEE 802.11b interface unit. For more information, see "IEEE 802.11b (Wireless LAN) Configuration".

Reference

- "Printing the Test Page", Quick Installation Guide.
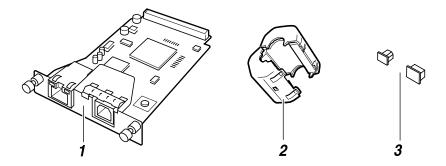- p.61 "IEEE 802.11b (Wireless LAN) Configuration"

Attaching Gigabit Ethernet Board Type A

⚠️CAUTION

- Do not touch the inside of the controller board compartment. Doing so may cause a malfunction or a burn.
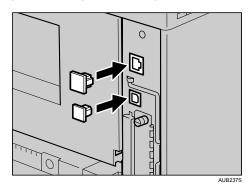
🟥 **Important**

- The printer's ethernet and USB ports are not available when the Gigabit Ethernet board is attached to the printer. Instead, you can use the ethernet port and USB port mounted on the board.

- Before handling the Gigabit Ethernet board, ground yourself by touching something metal to discharge any static electricity. Static electricity can damage the Gigabit Ethernet board.

- Do not subject the Gigabit Ethernet board to physical shocks.

1. **Check the contents of the box.**
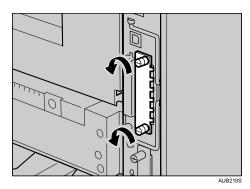
AUB249S

    1. **Gigabit Ethernet Board**

    2. **Ferrite Core**

    3. **Protective caps (one each for the ethernet port and the USB port)**

2. **Turn off the power, and then unplug the power cable.**

3. **Disconnect the cables from the Ethernet port and the USB port of the printer, and cover each port with its protective cap.**

AUB237S

4. **Remove the two screws and the cover of the Gigabit Ethernet board mounting bracket.**

AUB210S

The removed cover is not used when installing the Gigabit Ethernet board. Keep it for possible future use.

5. **Attach the Gigabit Ethernet board to the controller board.**

Insert the end of the Gigabit Ethernet board into the slot.

AUB238S

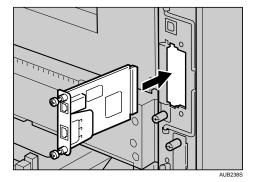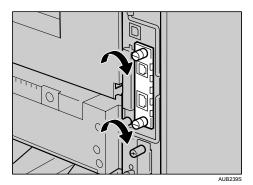**6. Fasten the Gigabit Ethernet board to the controller board with two screws.**

AUB239S

Check the Gigabit Ethernet board is connected firmly to the controller board.

⬇ Note

- Use a coin or similar object if the screws do not turn easily.

- After finishing installation, check the Gigabit ethernet board is installed properly: print the configuration page from the [List/Test Print] menu. If it is installed properly, you will see "Gigabit Ethernet" for "Device Connection" on the configuration page.

- If the Gigabit ethernet board is not installed properly, reinstall it following this procedure. If you cannot install it properly even after attempting reinstallation, contact your sales or service representative.

- You need to make settings with the control panel before using the Gigabit Ethernet board. For details, see "Ethernet Configuration".

🗈 Reference

- "Printing the Test Page", Quick Installation Guide.

- p.53 "Ethernet Configuration"

Attaching Optional Cards

⭐ **Important**
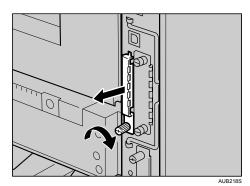
- Do not subject the optional cards from physical shocks.
- Using the upper slot is recommended for inserting the cards.
- Do not touch the optional cards while the printer is in use. It may come loose, even if pushed only slightly.

1. **Check the package contains the following:**
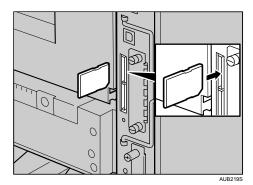
AET104S

2. **Turn off the power, and then unplug the power cable.**

3. **Remove the screw and the cover of the card slot at the back of the printer.**

AUB218S
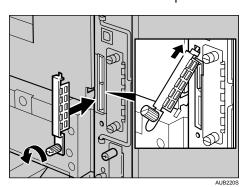
Be sure to keep a screw removed during installation.

4. **Carefully insert the optional card into the upper slot, until the card clicks into the place.**

AUB219S
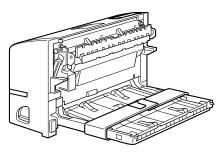
5. **Reattach the cover over the optional card. Fasten the screw to secure the cover.**

AUB220S
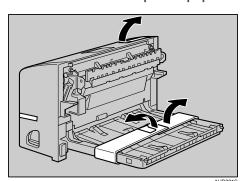
Attaching AD1000 (Duplex Unit)

⭐**Important**
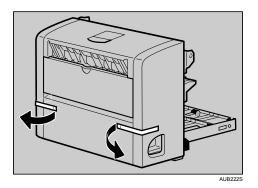
- If you attach the duplex unit and the paper feed unit, the paper feed unit must be attached prior to attaching the duplex unit.

- Check the printer nameplate to confirm the model code.

1. **Check the contents of the box for the following items:**

   AD1000 (Duplex Unit)
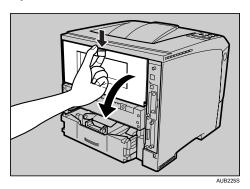
   AUB014S

2. **Turn off the power of the printer, and then unplug the power cable.**

3. **Remove the adhesive tape and paper.**

   AUB221S

AUB222S
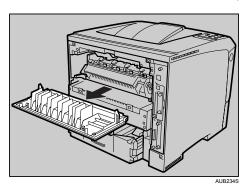
4. Open the rear cover.

AUB225S
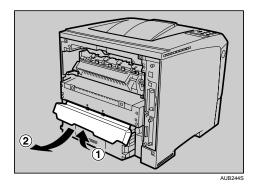
5. Lower the rear cover until it is horizontal, and then pull it away.

AUB234S
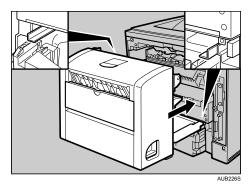
Proceed to step 7 if the paper tray cover is not installed.
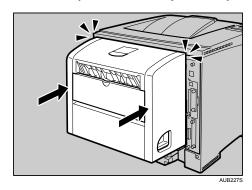
6. **Pull the bottom of the paper tray cover (①) up slightly, and then remove the paper tray cover (②), in the order shown in the illustration.**

AUB244S

7. **Push in the duplex unit along the rails at the back of the printer.**

AUB226S

8. **Push the duplex unit securely into the printer.**

AUB227S

⬇️**Note**

- After finishing installation, you can check whether the duplex unit is properly installed: Print the configuration page from the [List/Test Print] menu. If it is installed properly, you will see "Duplex Unit" for "Connection Equipment" on the configuration page.

- If the duplex unit is not installed properly, repeat the procedure from the start. If you cannot install it properly even after reinstallation, contact your sales or service representative.

- If the printing position is not correct, adjust the registration of the trays. For more information about adjusting the registration of the trays, see "Adjusting Tray Registration".

- The rear cover of the printer is not used with the duplex unit attached, keep it for possible future use.

🗒 Reference

- "Printing the Test Page", Quick Installation Guide.

- p.141 "Adjusting Tray Registration"

2

3. Connecting the Printer
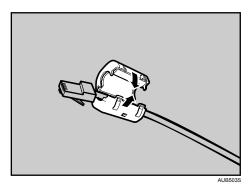
Network Connection

Follow the procedure below to connect the printer to the computer through the network. Prepare the hub and other network devices before connecting the 10BASE-T or 100BASE-TX cable to the printer's Ethernet port.
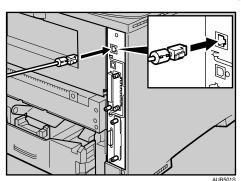
Alternatively, the optional Gigabit Ethernet board, which supports 1000BASE-T, is available.

⭐**Important**

- Use shielded Ethernet cable. Unshielded cables create electromagnetic interference that could cause malfunctions.

- The Ethernet cable is not supplied with this printer. Select your cable according to the network environment.

1. **Attach the supplied ferrite core at the printer end of the Ethernet cable.**

AUB503S
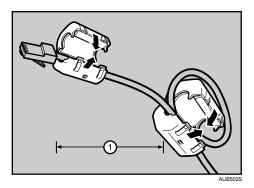
2. **Connect the other end of the cable to the printer's network, such as a hub.**

AUB501S

Using the Gigabit Ethernet cable
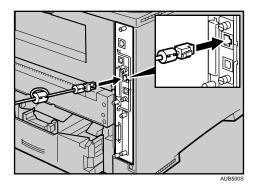
1. **For using the Gigabit Ethernet cable, attach one ferrite core at the printer end of the Ethernet cable, and attach the other ferrite core about 10 cm (4 inches) (①) from this core making a loop as shown.**

AUB502S

2. **Connect the Ethernet cable to the Gigabit Ethernet board.**

AUB500S

3. **Connect the other end of the cable to the network, such as a hub.**

🔽Note

- The printer's Ethernet and USB ports are not available when the Gigabit Ethernet board is attached to the printer.

🔖Reference

- "Network Connection", Software Guide.
- p.37 "Attaching Gigabit Ethernet Board Type A"

Reading the LED Lamps

For the standard Ethernet port

AUB065S

1. Yellow: comes on when 100BASE-TX is being used. It comes off when 10BASE-T is being used.
2. Green: comes on when the printer is properly connected to the network.

For the Gigabit Ethernet board

AUB066S
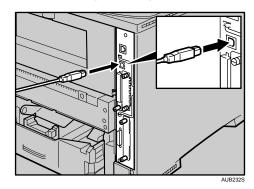
1. Yellow: comes on 100BASE-TX is being used.
2. Green: comes on when 10BASE-T is being used.
3. Green and yellow lamps come on when 1000BASE-T is being used.

USB Connection

⭐**Important**
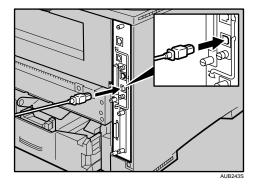
- The USB2.0 cable is not supplied with the printer. Obtain a cable that is suitable for the computer you are using.
- USB connection is possible under Windows Me/2000/XP, Windows Server 2003/2003 R2, and Mac OS X.
- Windows Me supports USB1.1 speed only.
- USB connection with Macintosh is only possible via the printer's USB port.

1. **Connect the square-shaped connector of the USB2.0 cable to the USB port.**

AUB232S

2. **If the Gigabit Ethernet board is attached, connect the square-shaped connector of the USB2.0 cable to the USB port of the board.**

AUB243S

The printer's Ethernet and USB ports are not available when the Gigabit Ethernet board is attached to the printer.

3. **Connect the opposite end's flat connector to devices such as your computer's USB interface, or a USB hub.**

📄**Reference**
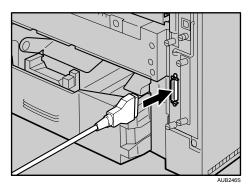
- "Installing the Printer Driver Using USB", Software Guide.

- p.37 "Attaching Gigabit Ethernet Board Type A"

3

Parallel Connection

⭐ **Important**

- The parallel interface cable is not supplied with the printer.

- The printer's parallel connection is a standard bidirectional interface that requires an IEEE 1284-compliant 36-pin parallel cable and a computer parallel port.

- Use shielded interface cable. Unshielded cables create electromagnetic interference that could cause malfunctions.

- Voltage rating of the computer's parallel port: DC 5 V (max.)

1. Turn off the printer and computer.

2. Connect the cable to the interface socket of the IEEE 1284 port.

AUB246S

3. Securely attach the other end of the parallel cable to your computer's parallel port. Secure the cable.

📄 **Reference**

- "Printing with Parallel Connection", Software Guide.

4. Configuration

Ethernet Configuration
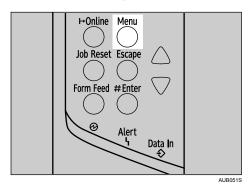
Make the following network settings according to the network interface you are using.
You can use SmartDeviceMonitor for Admin or a Web browser to make IP address-related settings in a TCP/IP-capable environment.

⭐ Important

- Configure the printer for the network using the control panel.
- The following table shows the control panel settings and their default values. These items appear in the [Host Interface] menu.

Setting Name	Value
IPv4 Settings	• DHCP: On • IPv4 Address: 011.022.033.044 • Subnet Mask: 000.000.000.000 • Gateway Address: 000.000.000.000
IPv6 Settings	Stateless sett.: Active
Frame Type (NW)	Auto Select
Active Protocol	• IPv4: Active • IPv6: Not Active • NetWare: Active • SMB: Active • AppleTalk: Active
Ethernet Speed	Auto Select
LAN Type	Ethernet

⬇ Note

- If DHCP is in use, the IP address, subnet mask, and gateway address are all set automatically.
- Make this setting only when it is necessary. See Software Guide.

1. **Press the [Menu] key.**

AUB051S

The [Menu] screen appears.

2. **Press the [▲] or [▼] key to display [Host Interface], and then press the [# Enter] key.**

```
Menu:
  Host Interface
```

3. **Press the [▲] or [▼] key to display [Network Setup], and then press the [# Enter] key.**

```
Host Interface:
  Network Setup
```

4. **Press the [▲] or [▼] key to display [Active Protocol], and then press the [# Enter] key.**

```
Network Setup:
  Active Protocol
```

5. **Press the [▲] or [▼] key to set the network protocol, and then press the [# Enter] key.**

```
Active Protocol:
  IPv4
```

6. **Press the [▲] or [▼] key to display [Active] or [Not Active], and then press the [# Enter] key.**

```
IPv4:
*Active
```

Set other protocols you need to set in the same way.

- Select [Not Active] for unused protocols.
- Enable IPv4 to use the Pure IPv4 environment of NetWare 5/5.1, NetWare 6/6.5.

7. **Press the [Escape] key until the screen returns to the [Network Setup] menu.**

```
Network Setup:
  Active Protocol
```

8. **If you use IPv4, assign the IPv4 address to the printer. Press the [▲] or [▼] key to display [IPv4 Settings], and then press the [# Enter] key.**

```
Network Setup:
  IPv4 Settings
```

To get the IP address for the printer, contact your network administrator.

9. **To specify the IP Address, Press the [▲] or [▼] key to display [IPv4 Address], and then press the [# Enter] key.**

```
IPv4 Settings:
  IPv4 Address
```

If you use IPv4, also assign subnet mask and gateway address.

10. **Press the [▲] or [▼] key to enter the address, and then press the [# Enter] key.**

```
IPv4 Address:
  192.  0.  0.  0
```

Press the [▼] or [▲] key to enter the left most entry field of the address. After entering the left field, press the [# Enter] key, and then you can enter the next field. After completing to enter in the all fields, press the [# Enter] key.

Do not set "011.022.033.044" as the IP address.

11. **If you use IPv4, use this method of assigning IPv4 address to assign subnet mask and gateway address.**

Press the [▲] or [▼] key to select [Subnet mask] or [Gateway Address], and then press the [# Enter] key.

12. **Press the [Online] key.**

The initial screen appears.

13. **Print a configuration page to confirm the settings made.**

🗉 Reference
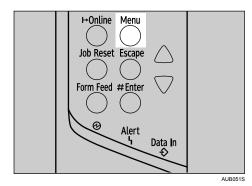
- "Printing the Test Page", Quick Installation Guide.

Using DHCP - Detecting the Network Address Automatically

⭐ **Important**

- When you use this printer in DHCP environment, select [DHCP] following this procedure.
- When [DHCP] is selected, you cannot make settings for the following items:
    - IPv4 Address
    - Subnet Mask
    - Gateway Address
- Consult your network administrator for information about making network settings.

1. **Press the [Menu] key.**

AUB051S

The [Menu] screen appears.

2. **Press the [▲] or [▼] key to display [Host Interface], and then press the [# Enter] key.**

```
Menu:
  Host Interface
```

3. **Press the [▲] or [▼] key to display [Network Setup], and then press the [# Enter] key.**

```
Host Interface:
  Network Setup
```

4. **Press the [▲] or [▼] key to display [IPv4 Settings], and then press the [# Enter] key.**

```
Network Setup:
  IPv4 Settings
```

5. **Press the [▲] or [▼] key to display [DHCP], and then press the [# Enter] key.**

```
IPv4 Settings:
 DHCP
```

6. **Press the [▲] or [▼] key to select [On] or [Off], and then press the [# Enter] key.**

```
DHCP:
 *On
```

The address will be detected by the printer.

The default setting is [On].

7. **Press the [Online] key.**

The initial screen appears.

8. **Print a configuration page to confirm the settings made.**

Reference

- "Printing the Test Page", Quick Installation Guide.

Making Network Settings for Using NetWare
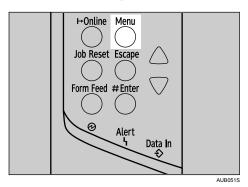
If you use NetWare, select the frame type for NetWare.

Select one of the items below if necessary.

- Auto Select (Default)
- Ethernet II
- Ethernet 802.2
- Ethernet 802.3
- Ethernet SNAP

Important

- Usually, use the default setting ([Auto Select]). When you first select [Auto Select], the frame type detected by the printer is adopted. If your network can use more than two frame types, the printer may fail to select the correct frame type if [Auto Select] is selected. In this case, select the appropriate frame type.

1. **Press the [Menu] key.**

AUB051S

The [Menu] screen appears.

2. **Press the [▲] or [▼] key to display [Host Interface], and then press the [# Enter] key.**

```
Menu:
  Host Interface
```

3. **Press the [▲] or [▼] key to display [Network Setup], and then press the [# Enter] key.**

```
Host Interface:
  Network Setup
```

4. **Press the [▲] or [▼] key to display [Frame Type (NW)], and then press the [# Enter] key.**

```
Network Setup:
  Frame Type (NW)
```

5. **Press the [▲] or [▼] key to select the frame type, and then press the [# Enter] key.**

```
Frame Type (NW):
*Auto Select
```

6. **Press the [Online] key.**

The initial screen appears.

7. **Print a configuration page to confirm the settings made.**

Reference
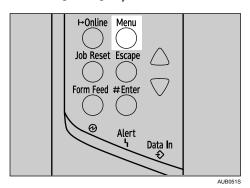
• "Printing the Test Page", Quick Installation Guide.

Setting the Ethernet Speed

Set the access speed for Ethernet. Confirm your network environment, and then select a speed that matches it using the following table.

Router/HUB	Printer				
	10Mbps Half D.	10Mbps Full D.	100Mbps Half D.	100Mbps Full D.	Auto Select
10 Mbps half duplex	○	-	-	-	○
10 Mbps full duplex	-	○	-	-	-
100 Mbps half duplex	-	-	○	-	○
100 Mbps full duplex	-	-	-	○	-
auto-negotiation (auto selection)	○	-	○	-	○

⭐ **Important**

- Connection cannot be established if the Ethernet speed does not match your network's transmission speed.

- The auto-negotiation mechanism allows two interfaces to automatically determine an optimum Ethernet speed as soon as they are connected. We recommend you select [Auto Select].

1. **Press the [Menu] key.**

AUB051S

The [Menu] screen appears.

2. **Press the [▲] or [▼] key to display [Host Interface], and then press the [# Enter] key.**

```
Menu:
  Host Interface
```

3. **Press the [▲] or [▼] key to display [Network Setup], and then press the [# Enter] key.**

```
Host Interface:
  Network Setup
```

4. **Press the [▲] or [▼] key to display [Ethernet Speed], and then press the [# Enter] key.**

```
Network Setup:
  Ethernet Speed
```

5. **Press the [▲] or [▼] key to select the ethernet speed, and then press the [# Enter] key.**

```
Ethernet Speed:
 *Auto Select
```

6. **Press the [Online] key.**

The initial screen appears.

7. **Print a configuration page to confirm the settings made.**

🔸 **Note**

- If Ethernet and wireless LAN (IEEE 802.11b) are both connected, select which interface you want to use under [LAN Type].

- For details about printing the configuration page, see "Printing the Test Page", Quick Installation Guide.

📄 **Reference**
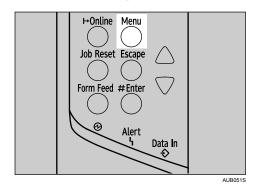
- "Printing the Test Page", Quick Installation Guide.

IEEE 802.11b (Wireless LAN) Configuration

Configure the printer to use IEEE 802.11b (Wireless LAN). The following table shows the control panel settings and their default values. These items appear in the [Host Interface] menu.

Setting Name	Default Value
Comm. Mode	802.11 Ad hoc
Channel	220-240V (1-13) 13 120V (1-11) 11
Trans. Speed	Auto
SSID	blank
Security Method	None

⭐**Important**

- To use IEEE 802.11b (Wireless LAN), set as the followings using the control panel: press the [Menu] key, and then select [Host Interface], [Network Setup], [LAN Type], and then [IEEE 802.11b]. Also, set the IPv4 Address, Subnet Mask, Gateway Address, DHCP, Frame Type (NW), and Active Protocol under the [Network Setup] menu. For details about setting items, see p.53 "Ethernet Configuration".

- The 802.11b interface unit cannot be used simultaneously with a standard ethernet interface.

1. **Press the [Menu] key.**

AUB051S

The [Menu] screen appears.

2. **Press the [▲] or [▼] key to display [Host Interface], and then press the [# Enter] key.**

```
Menu:
  Host Interface
```

3. **Press the [▲] or [▼] key to display [IEEE 802.11b], and then press the [# Enter] key.**

```
Host Interface:
  IEEE 802.11b
```

4. **Press the [▲] or [▼] key to display [Comm. Mode], and then press the [# Enter] key.**

```
IEEE 802.11b:
  Comm. Mode
```

5. **Press the [▲] or [▼] key to select the transmission mode of IEEE 802.11b, and then press the [# Enter] key.**

```
Comm. Mode:
*802.11 Ad hoc
```

The factory default is [802.11 Ad hoc].

To use an IEEE 802.11b card for which the SSID (Network Name) setting is not necessary, select [Ad hoc].

The transmission mode of IEEE 802.11b can also be set using a Web browser. For details, see Web browser, and "Configuring the Network Interface Board", Software Guide.

6. **If [802.11 Ad hoc] or [Ad hoc] is selected for [Comm. Mode], set the channel to use for transmission.**

Confirm the network administrator for the channel to use.

7. **In the [IEEE 802.11b] menu, press the [▲] or [▼] key to display [Channel], and then press the [# Enter] key.**

```
IEEE 802.11b:
  Channel
```

8. **Press the [▲] or [▼] key to set the channel, and then press the [# Enter] key.**

220-240V

```
Channel:
 (1-13)        13
```

120V

```
Channel:
(1-11)          11
```

9. **Set [Trans. Speed] in the same way.**

```
Trans. Speed:
*Auto
```

The factory default is [Auto]. If you need to change the transmitting speed depending on environment you are using, select the appropriate transmitting speed.

10. **Print a configuration page to confirm the settings made.**

🗉 Reference

- "Printing the Test Page", Quick Installation Guide.

Setting SSID

If [Infrastructure] or [802.11 Ad hoc] is selected for [Comm. Mode], set SSID to use for transmission. Consult your network administrator for the SSID to use.

1. **In the [IEEE 802.11b] menu, press the [▲] or [▼] key to display [SSID], and then press the [# Enter] key.**

```
IEEE 802.11b:
  SSID
```

If an SSID has been set, you can check the SSID setting.

2. **Press the [▲] or [▼] key to display [Enter ID], and then press the [# Enter] key.**

```
SSID:
  Enter ID
```

3. **Press the [▲] or [▼] key to enter characters, and then press the [# Enter] key.**

```
SSID: [3]
  AIR
```

The number of characters you have entered is displayed on the top right of the screen.

The characters that can be used are ASCII 0x20-0x7e (32 bytes), 16 digits.

4. **Print a configuration page to confirm the settings made.**

🔽 **Note**

- SSID can also be set using a Web browser. For details, see the Web Image Monitor Help, and "Configuring the Network Interface Board", Software Guide.

- WEP key can also be set using a Web browser. For details, see Web Image Monitor Help.

- For details about printing the configuration page, see "Printing the Test Page", Quick Installation Guide.

🔖 **Reference**

- "Configuring the Network Interface Board", Software Guide.

- "Printing the Test Page", Quick Installation Guide.
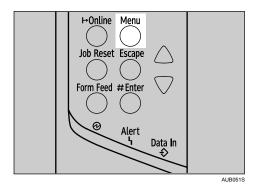
- Web Image Monitor Help

Setting Security Method of Wireless LAN

Setting a WEP key

In the case of using a WEP key on a network, activate the WEP setting to be used for communication along with WEP.

⭐ **Important**

- **When activating the WEP Setting, you must enter the WEP key.**

1. **Press the [Menu] key.**

AUB051S

The [Menu] screen appears.

2. **Press the [▲] or [▼] key to display [Host Interface], and then press the [# Enter] key.**

```
Menu:
  Host Interface
```

3. **Press the [▲] or [▼] key to display [IEEE 802.11b], and then press the [# Enter] key.**

```
Host Interface:
  IEEE 802.11b
```

4. **Press the [▲] or [▼] key to display [Security Method], and then press the [# Enter] key.**

```
IEEE 802.11b:
  Security Method
```

5. **Press the [▲] or [▼] key to display [WEP], and then press the [# Enter] key.**

When activating the WEP Setting, you will need to enter the WEP key. If you have not entered the key, be sure to enter it.

65

```
Security Method:
*WEP
```

6. **Press the [▲] or [▼] key to select [Change (HEX)] or [Change (ASCII)], and then press the [# Enter] key.**

```
WEP Key:
  Change(HEX)
```

7. **Press the [▲] or [▼] key to enter the characters, and then press the [# Enter] key.**

```
WEP Key:[26]
************3
```

When entering a character, pressing the [# Enter] key will mask it with an asterisk for security reasons.

When using 64 bit WEP, up to 10 characters can be used for hexadecimal and up to five characters for ASCII. When using 128 bit WEP, up to 26 characters can be used for hexadecimal and up to 13 characters for ASCII.

The number of characters that can be entered is limited to 10 or 26 for hexadecimal and 5 or 13 for ASCII.

For ASCII character strings, each uppercase and lowercase letter is recognized respectively.

8. **Press the [Online] key.**

The initial screen appears.

9. **Print a configuration page to confirm the settings made.**

🔽 **Note**

- In the case of using a WEP key on a network, activate the WEP setting to be used for communication along with WEP.
- Confirm the network administrator for the WEP Key to use.
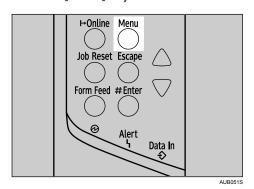
📑 **Reference**

- "Printing the Test Page", Quick Installation Guide.
- Web Image Monitor Help

Setting WPA

In the case of using WPA on a network, activate the WPA setting to be used for communication along with WPA. Consult your network administrator for information about making authentication settings.

⭐**Important**

- For setting WPA, installing the optional HDD or the optional Data Storage Card is required.

1. Press the [Menu] key.

AUB051S

The [Menu] screen appears.

2. Press the [▲] or [▼] key to display [Host Interface], and then press the [# Enter] key.

```
Menu:
  Host Interface
```

3. Press the [▲] or [▼] key to display [IEEE 802.11b], and then press the [# Enter] key.

```
Host Interface:
  IEEE 802.11b
```

4. Press the [▲] or [▼] key to display [Security Method], and then press the [# Enter] key.

```
IEEE 802.11b:
  Security Method
```

5. Press the [▲] or [▼] key to display [WPA], and then press the [# Enter] key.

```
Security Method:
*WPA
```

6. Press the [▲] or [▼] key to display [Encrypt. Meth.], and then press the [# Enter] key.

```
WPA:
  Encript. Meth.
```

7. **Press the [▲] or [▼] key to select encryption method, and then press the [# Enter] key.**

```
Encrypt. Meth.:
*TKIP
```

Consult your network administrator for information about making encryption settings.

Encryption settings are as follows:

- TKIP

    Uses the same algorithm as RC4, but further reduces vulnerability using methods such as key mixing.

- CCMP(AES)

    Increases security using AES (Advanced Encryption Standard).

    Wait for two seconds. The display returns to the [WPA] menu.

8. **Press the [▼] or [▲] key to display [Authent. Meth.], and then press the [# Enter] key.**

```
WPA:
 Authent. Meth.
```

9. **Press the [▼] or [▲] key to select authentication method, and then press the [# Enter] key.**

```
Authent. Meth.
*WPA-PSK
```

Authentication settings are as follows:

- WPA-PSK

    Performs authentication using an encryption key (a Pre-Shared Key) that is shared by the access point and client. Enter the Pre-Shared Key using between 8 and 63 ASCII characters. Select [PSK Entry] using the [▼] or [▲] key in the [WPA] menu, and then enter the characters.

- WPA

    WPA uses CA certificates and a RADIUS server to provide secure wireless communication.

- WPA2-PSK

    As with WPA-PSK, authenticate using the encryption key (a Pre-Shared Key)shared by the access point and client. Enter Pre-Shared Key .using between 8 and 63 ASCII characters.

- WPA2

    WPA2 is an expanded version of WPA that fully supports IEEE802.11i.

Wait for 2 seconds, the display returns to the [WPA] menu.

10. **Press the [Online] key.**

The initial screen appears.

11. **Print a configuration page to confirm the settings made.**

📄 Reference

- "Printing the Test Page", Quick Installation Guide.

Configuring WPA (802.1X)

WPA (802.1X) uses an authentication server to provide greatly enhanced security compared to WPA-PSK. WPA (802.1X) can be configured using Web Image Monitor's administrator mode.

You can select four types of EAP authentication method: EAP-TLS, LEAP, EAP-TTLS, and PEAP. Note that each EAP authentication method has different configuration settings and authentication procedures.

Types and requirements of certificates are as follows:

If a certificate is required, configure all settings after installing the certificate.

EAP Types Requiring a "Site Certificate"

> EAP-TLS, EAP-TTLS, PEAP (Necessary except LEAP)

EAP Types Requiring a "Site Certificate" and/or a "Device Certificate"

> EAP-TLS, PEAP (Phase 2 is for TLS only)

⭐ **Important**

- To set WPA (802.1X), you must enable SSL.
- To set WPA (802.1X), you must use Web Image Monitor.

📄 **Reference**

- "Protection Using Encryption", Software Guide.
- "Using Web Image Monitor", Software Guide.

Installing a Site Certificate

1. **Access the authentication server and obtain the "CA Certificate".**

   Methods of obtaining certificates differ according to the operating system you are using.

2. **Start your Web browser.**

   For details about the login user name and password, consult your administrator.

3. **Enter "http://(printer's address)/" in the address bar of a Web browser.**

4. **Enter your user name and password, and then click [Login].**

5. **Click [Configuration].**

6. **Click [Site Certificate] in "Security".**

7. **Click [Browse] on [Site Certificate to Import], and then select the "CA Certificate" you obtained.**

8. **Click [Import].**

9. **Check that the imported certificate's [Status] shows "Trustworthy".**

    If [Site Certificate Check] shows "Active", and the [Status] of the certificate shows "Untrustworthy", communication might not be possible.

10. **Click [OK].**

11. **Click [Logout].**

12. **Quit the Web Image Monitor.**

⬇ **Note**

- For details about user name and password, see, Note to Administrator.

Installing Device Certificate

4

1. **Start your Web browser.**

2. **Enter "http://(printer's address)/" in the address bar of a Web browser.**

3. **Enter your user name and password, and then click [Login].**

    For details about the login user name and password, consult your administrator.

4. **Click [Configuration].**

5. **Click [Device Certificate] in "Security".**

6. **Click [Certificate 2] on "Device Certificate" window, and then click [Request].**

7. **Enter appropriate "Common Name" and "Country Code" on "Certificate Information" page, and then click [OK].**

8. **"Updating..." appears. Wait for about 2 minutes, and then click [OK].**

9. **Click [Details], shown in the "Device Certificate" window as the memo pad icon for "Requesting".**

10. **Select all, and then copy the entire "Text for Requested Certificate" text that is displayed in the "Certificate Status" window.**

11. **Access the certificate authority server, and then obtain the "CA Signified Certificate" using the text copied into "Text for Requested Certificate" windows.**

    Obtaining the certificate differs depending on the environment you want to use.

12. **Click [Certificate 2] on "Device Certificate" window, and then click [Install].**

13. **Using a text editor, open the "CA Signified Certificate" downloaded in step 11, and then copy over all the text.**

14. **In the [Install Certificate] window, paste all the text copied into "CA Signified Certificate".**

15. **Click [OK].**

16. **"Updating..." appears. Wait for about 1 or 2 minutes, and then click [OK].**

17. **Check that the "Device Certificate" shows "Installed".**

18. Click [Certificate 2] on "Certification", and then click [OK].

⬇️**Note**

- If you request two certificates simultaneously, the certificate authority might not display either certificate. Click [Cancel Request] to cancel the request.

- You can select [Certificate 1] and [Certificate 2] in the "Device Certificate" window. Note that if you select [Certificate 1] in the "Device Certificate" window, you must select "Certificate 1" in the "IEEE802.11b" drop down menu in the "Certification" window.

- Click [Cancel Request] to cancel the request for the server certificate.

- For details about user name and password, see, Note to Administrator

- If "Not found" appears after clicking [OK] in steps 8 and 16, wait one or two minutes, and then click [Refresh].

📘**Reference**

- Note to Administrator

Setting Items of WPA

1. Start your Web browser.

2. Enter "http://(printer's address)/" in the address bar of a Web browser.

3. Enter your login user name and password, and then click [Login].

For details about the login user name and password, consult your administrator.

4. Click [Configuration], and then click [Wireless LAN Settings] in "Interface".

5. Select [Infrastructure Mode] in "Communication Mode".

6. Enter the alphanumeric characters (a-z, A-Z, or 0-9) in "SSID" according to the access point you want to use.

7. Select [WPA] in "Security Type".

8. Select [TKIP] or [CCMP (AES)] in "WPA Encryption Method" according to the access point you want to use.

9. Select [WPA] in "WPA Authentication Method".

10. In "User Name", enter the user name set in the RADIUS server.

11. Enter the domain name in "Domain Name".

12. Select "EAP Type". Configurations differ according to the EAP Type.

- EAP-TLS
    - Select the certificate you want to use in "WPA Client Certificate".

      Make the following settings according to the operating system you are using:
    - Select [On] or [Off] in "Authenticate Server Certificate".

- Select [On] or [Off] in "Trust Intermediate Certificate Authority".

- Enter the host name of the RADIUS server on "Server ID".

- LEAP

  - Click [Change] in "Password", and then enter the password set in the RADIUS server.

- EAP-TTLS

  - Click [Change] in "Password", and then enter the password set in the RADIUS server.

  - Click [Change] in "Phase 2 User Name", and then enter the user name set in the RADIUS server.

  - Select [CHAP], [MSCHAP], [MSCHAPv2], [PAP], or [MD5] in "Phase 2 Method".

  - Certain methods might not be available, depending on the RADIUS server you want to use.

    Make the following settings according to the operating system you are using:

  - Select [On] or [Off] in "Authenticate Server Certificate".

  - Select [On] or [Off] in "Trust Intermediate Certificate Authority".

  - Enter the host name of the RADIUS server in "Server ID".

- PEAP

  - Click [Change] in "Password", and then enter the password set in the RADIUS server.

  - Click [Change] on "Phase 2 User Name", and then enter the user name set in the RADIUS server.

  - Select [MSCHAPv2] or [TLS] in "Phase 2 Method".

  - When you select [TLS], Select the client certificate you want to use in "WPA Client Certificate".

    Make the following settings according to the operating system you are using:

  - Select [On] or [Off] in "Authenticate Server Certificate".

  - Select [On] or [Off] in "Trust Intermediate Certificate Authority".

  - Enter the host name of the RADIUS server on "Server ID".

13. **Click [OK].**

14. **Click [Logout].**

15. **Quit the Web Image Monitor.**

🔽 **Note**

- If there is a problem with settings, you might not be able to communicate with the printer. To identify the problem, open the Web Image Monitor system log or print a network summary.

- If you cannot identify the problem, reset the printer interface to normal, and then repeat the procedure from the beginning.

4

5. Paper and Other Media

Paper and Other Media Supported by This Printer

This section describes the paper size, feed direction, and the maximum amount of paper that can be loaded into each paper tray in this printer.

⏬ **Note**

- The following symbols and terminology are used to represent the feed direction.

In this manual	On the display	Paper feed direction
⬜↑ (Feed direction)	A5 (148×210) 5 1/2 × 8 1/2	Short-edge feed direction
⬜↑ (Feed direction)	A5 (210×148) 8 1/2 × 5 1/2	Long-edge feed direction

- Be careful of the paper feed direction. The direction is determined for each paper size.

Input Paper Sizes Tray 1

Metric version / Inch version
A4⬜, B5 JIS⬜, A5⬜, $8^1/_2 × 14$(Legal)⬜, $8^1/_2 × 11$(Letter)⬜, $5^1/_2 × 8^1/_2$⬜

The following sizes are supported but not indicated on the tray dial. You should set the tray dial to "✴", and select the paper size with the control panel.

Metric version / Inch version
A5⬜, $5^1/_2 × 8^1/_2$⬜, $8^1/_4 × 13$(Folio)⬜, $8^1/_2 × 13$(Foolscap)⬜, 8 × 13(F/GL)⬜, 7.68 × $10^1/_2$(16K)⬜

Tray 1 supports custom size paper, approximately 139.7 - 216 mm (5.50 - 8.50 inches) in width, and 139.7 - 356 mm (5.50 - 14.01 inches) in length. Set as custom size using control panel.

The supported size may differ depending on the printer language you use.

Input Paper Sizes Paper Feed Unit (Tray 2/3)

Metric version / Inch version
A4⊡, B5 JIS⊡, A5⊡, $8^1/_2$ × 14(Legal)⊡, $8^1/_2$ × 11(Letter)⊡, $5^1/_2$ × $8^1/_2$⊡

The following sizes are supported but not indicated on the tray dial. You should set the tray dial to "✳", and select the paper size with the control panel.

Metric version / Inch version
$7^1/_4$ × $10^1/_2$(Executive)⊡, $8^1/_4$ × 13(Folio)⊡, $8^1/_2$ × 13(Foolscap)⊡, 8 × 13(F/GL)⊡, 7.68 × $10^1/_2$(16K)⊡

Tray 2/3 supports custom size paper, approximately 139.7 - 216 mm (5.50 - 8.50 inches) in width, and 139.7 - 356 mm (5.50 - 14.01 inches) in length.

Input Paper Sizes Bypass Tray

The following paper size is supported but the paper size should be set with the control panel.

There is no dial on the tray.

Metric version / Inch version
A4⊡, B5 JIS⊡, A5⊡⊟, A6⊡, $8^1/_2$ × 14(Legal)⊡, $8^1/_2$ × 11(Letter)⊡, $5^1/_2$ × $8^1/_2$⊡⊟, $7^1/_4$ × $10^1/_2$(Executive)⊡, $8^1/_4$ × 13(Folio)⊡, $8^1/_2$ × 13(Foolscap)⊡, 8 × 13(F/GL)⊡, Com#10 Env ⊡, C5 Env⊡, C6 Env⊡, DL Env⊡, Monarch Env⊡, 7.68 × $10^1/_2$(16K)⊡

Bypass Tray supports custom size paper, approximately 64 - 216 mm (2.52 - 8.50 inches) in width, and 139.7 - 432 mm (5.50 - 17.01 inches) in length. Set as custom size using control panel.

The supported size may differ depending on the printer language you use.

Input Paper Sizes Envelope Feeder Unit

The following paper size is supported but the paper size should be set with the control panel.

There is no dial on the tray.

Metric version / Inch version
Com#10 Env⊡, C5 Env⊡, C6 Env⊡, DL Env⊡, Monarch Env⊡.

Paper Weight and Number of Sheets to Be Set

	Supported paper weight	Maximum number of sheets (plain paper)
Tray 1	60 - 130 g/m^2 (16 - 34 lb.)	500 (80 g/m^2, 20 lb.)
Bypass Tray	52 - 162 g/m^2 (14 - 43 lb.)	100 (80 g/m^2, 20 lb.) For other kind of papers, see p.78 "Types of Paper and Other Media".
Paper Feed Unit (Tray 2, Tray 3)	60 - 130 g/m^2 (16 - 34 lb.)	500 (80 g/m^2, 20 lb.)
Envelope Feeder Type 400	See p.85 "Loading Paper".	

Check that the top of the stack is not higher than the limit mark inside the tray.

Paper Size Supported by Both Side Printing

The following paper sizes can be printed on both sides:

Metric version / Inch version
A4▽, B5 JIS▽, A5▽▷, 8^1/$_2$ × 14(Legal)▽, 8^1/$_2$ × 11(Letter)▽, 5^1/$_2$ × 8^1/$_2$▽▷, 8 × 13(F/GL)▽, 8^1/$_2$ × 13(Foolscap)▽, 8^1/$_4$ × 13(Folio)▽, 7.68 × 10^1/$_2$ (16K)▽

🡇 **Note**

- The envelope feeder unit requires the installation of the optional paper feed unit.
- Custom paper size is not supported by both sides printing.
- JIS stands for "Japanese Industrial Standard".

Paper Recommendations

Loading Paper

📛 **Important**

- Do not use ink-jet printer paper because it may stick to the fusing unit and cause a paper misfeed.

- When printing on OHP transparencies that have a print side, load them with the print side over on the bypass tray. Not taking this precaution may cause them to stick to the fusing unit and cause misfeeds.

- Set the paper as described below

  - Tray 1: Print side facing down

  - Bypass Tray: Print side facing up

  - Paper Feed Unit (Tray 2, Tray 3): Print side facing down

- Print quality cannot be guaranteed if paper other than the ones recommended is used. For more information about recommended paper, contact your sales or service representative.

- Do not use paper that has already been printed onto by other printers.

Storing Paper

- Paper should always be stored properly. Improperly stored paper might result in poor print quality, paper misfeeds, or printer damage. Recommendations are as follows:

  - Avoid storing paper in humid areas.

  - Avoid exposing paper to direct sunlight.

  - Store on a flat surface.

- Keep paper in the package in which the paper came.

Types of Paper and Other Media

Plain Paper

| Paper thickness	60 - 130 g/m^2 (16 - 34 lb.)
Printer setup	Make the following settings using the control panel: • Press the [Menu] key, select [Paper Input], and then select [Plain Paper] for the selected tray's paper type.

Printer driver setup	Click [Plain] or [Plain/Recycled] in the "Paper type:" list.
Enabled paper feeding tray	Any input tray can be used.
Number of sheets that can be set	Tray 1: 500 Tray 2, Tray 3 (Paper Feed Unit TK1030): 500 Bypass Tray: 100 • Make sure paper is not stacked higher than the upper limit mark (▼) inside the tray. Make sure paper is not stacked higher than the paper guides inside the bypass tray.
Both-sided printing	Possible
Additional cautions	When printing on 91 - 130 g/m^2 paper, print speed is slightly slower to when printing on paper of 60 - 91 g/m^2.

Letterhead

Printer setup	Make the following settings using the control panel: • Press the [Menu] key, select [Paper Input], and then select [Letterhead] for the selected tray's paper type.
Printer driver setup	Click [Letterhead] in the "Paper type:" list.
Both-sided printing	Possible

Thick Paper

Paper thickness	130 - 162 g/m^2 (8 - 43 lb.)
Printer setup	Make the following settings using the control panel: • Press the [Menu] key, select [Paper Input], and then select [Thick Paper] for the selected tray's paper type.
Printer driver setup	Click [Thick] in the "Paper type:" list.
Enabled paper feeding tray	Any input tray can be used. • Make sure paper is not stacked higher than the upper limit mark (▼) inside the tray. Make sure paper is not stacked higher than the paper guides inside the bypass tray.

Both-sided printing	Not possible
Additional cautions	Print speed is slightly slower than when using plain paper.

OHP transparencies

Printer setup	Make the following settings using the control panel: • Press the [Menu] key, select [Paper Input], and then select [Transparency] for the bypass tray's paper type.
Printer driver setup	Click [OHP Transparency] in the "Paper type:" list.
Enabled paper feeding tray	This paper type can be printed only from the bypass tray.
Number of sheets that can be set	Bypass Tray: 20 • Make sure paper is not stacked higher than the paper guides inside the bypass tray.
Both-sided printing	Not possible
Additional cautions	• Print speed for OHP transparencies is slower than for plain paper. • Depending on the setting made for mode switching, the printer goes into standby mode 30 or 40 seconds after receiving a job. • We recommend you use a 4000 ANSI lumen or brighter overhead projector to project OHP transparencies. • When printing on OHP transparencies that have a print side, load them with the print side facing up on the bypass tray.

Envelopes
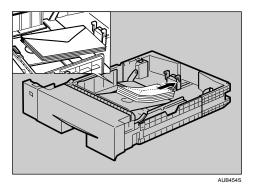
Printer setup	Make the following settings using the control panel: • Press the [Menu] key, select [Paper Input], and then select [Thick Paper] for the selected tray's paper type. • Paper type settings made using the printer driver have priority over paper type settings made using the control panel settings.
Printer driver setup	Click [Thick] in the "Paper Type:" list.

Enabled paper feeding tray	Tray 2, Tray 3 (Envelope Feeder Type 400)
	Bypass Tray
	• Make sure paper is not stacked higher than the upper limit mark (▼) inside the tray. Make sure paper is not stacked higher than the paper guides inside the bypass tray.
Both-sided printing	Not possible

Additional cautions	• Check the print side is facing up.
	• Check there is no air in the envelopes before loading.
	• For better print quality, we recommend the right, left, top, and bottom print margins to be at least 20 mm (0.8") each.
	• Load only one size and type of envelope at a time.
	• Before loading envelopes, flatten their leading edges (the edge going into the printer) by running a pencil or ruler across them.
	• Some kinds of envelope might cause misfeeds, wrinkles or print poorly.
	• Print quality on envelopes may be uneven if parts of an envelope have differing thicknesses. Print one or two envelopes to check print quality.
	• The following can occur when printing on envelopes:
	    • creased long edges
	    • smudged backs
	    • blurred print
	If envelopes are printed over with solid black, white streaks might appear where the envelopes overlap. Using the envelope lever can resolve these problems. For more information about envelope lever, see p.164 "Using the Envelope Lever".

🔸 **Note**
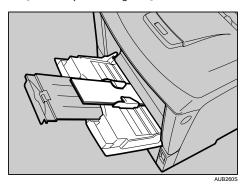
• Load envelopes with the print side down in the Tray1 or optional paper feed unit.

• Load envelopes with flaps closed to the left side of the tray. When printing with a printer driver, select the [Rotate by 180 degrees] check box on the "Misc." tab.

AUB454S

- Load envelopes with the print side facing up on the bypass tray.
- Load envelopes with flaps closed to the left side of the tray. When printing with a printer driver, select the [Rotate by 180 degrees] check box on the "Misc." tab.

AUB260S

Paper Not Supported by this Printer

Avoid using the following paper as they are not supported by this printer.
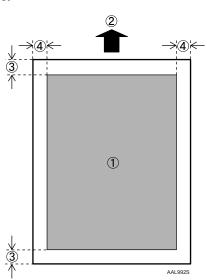
- Paper meant for an ink-jet printer
- Bent, folded, or creased paper
- Curled or twisted paper
- Torn paper
- Wrinkled paper
- Damp paper
- Paper that is dry enough to emit static electricity
- Paper that has already been printed onto, except a preprinted letterhead paper.

  Malfunctions are especially likely when using paper printed on by other than a laser printer (e.g. monochrome and color copiers, ink-jet printers, etc.)

- Special paper, such as thermal paper, aluminum foil, carbon paper and conductive paper

- Paper whose weight is heavier or lighter than the limitation

- Paper with windows, holes, perforations, cutouts, or embossing

- Adhesive label paper on which glue or base paper is exposed

- Paper with clips or staples

- Envelopes in the following conditions:

    - damp

    - excessively curled or twisted

    - stuck together

    - damaged in any way

    - with stamps attached

    - with windows, holes, perforations, cutouts or embossing

    - with metal clasps, string ties or metal folding bars

    - designed to be interlocked

    - with nicked edges or bent corners

    - with rough, wrinkled or laid finishes

    - with any exposed adhesive, when the flap is in the sealed or closed position

Print Area

The following shows the print area for this printer. Be sure to set the print margins correctly by the application.

Paper

AAL992S

1. Print area
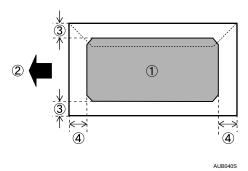
2. Feed direction

3. Approx. 4.2 mm (0.18 inches)

4. Approx. 4.2 mm (0.18 inches)
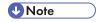
Note

- The print area may vary depending on the paper size, printer language and printer driver settings.

Envelope

AUB040S

1. Print area

2. Feed direction

3. Approx. 10 mm (0.39 inches)

4. Approx. 15 mm (0.59 inches)

Note

- The print area may vary depending on the paper size, printer language and printer driver settings.

Loading Paper

This describes how to load paper into the paper tray and bypass tray.

⚠CAUTION
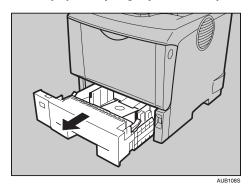
- Do not pull out the paper tray forcefully. If you do, the tray might fall and cause an injury.
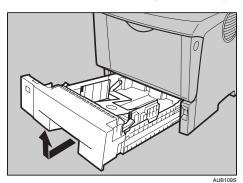
Loading Paper in Tray 1 and the Optional Paper Feed Unit

The following example explains loading procedure for the standard paper tray (Tray 1). The same procedure can be used for the optional paper feed unit.

⭐Important

- Make sure paper is not stacked above the limit mark inside the tray. Misfeeds might occur.
- Do not put different types of paper in a single paper tray.
- Up to 500 sheets of paper can be loaded in the paper feed unit. This means a maximum of 1,500 sheets can be simultaneously loaded when two additional paper feed units are installed.
- Confirm that paper fits under the rear guide.
- Do not slide the paper tray in with force. If you do, the front and side guides might move.

1. **Lift the paper tray slightly, and then pull it out until it stops.**

AUB108S

2. **Lift the front side of the tray, and then pull it out of the printer.**

AUB109S
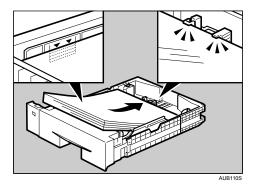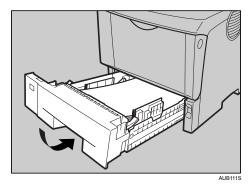
3. **Fan the paper before loading paper in the paper tray.**

AUB042S

4. **Load paper into the tray with the print side down.**

AUB110S

5. **Lift the front of the tray, and then slide it carefully into the printer until it stops.**

AUB111S
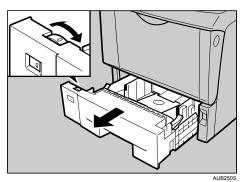
Reference

• p.75 "Paper and Other Media Supported by This Printer"
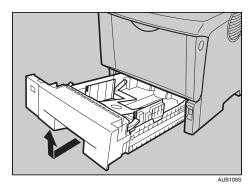
Changing the paper size

Important

• Confirm that the setting of the paper size dial matches the paper size and feed direction of the paper in the tray, otherwise the printer might be damaged, or printing problems might occur.

• If you want to use the paper size and feed direction that are not indicated on the paper size dial, set the dial to "✳". In this case, you should set the paper size using the control panel.

• Confirm that the catches return to their original positions securely. If they are not locked securely, paper misfeeds might occur.

• To avoid damage, pinch the paper guides when moving them.

• Confirm that the top of the stack is not higher than the limit mark inside the tray.

• Confirm that paper fits under the rear guide.

• Do not slide the paper tray in with force. If you do, the front and side guides might move.
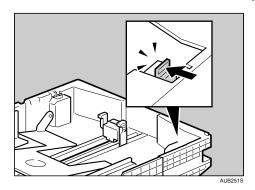
The following explanation uses the example of "Tray 1" for the paper tray.

1. **Lift the paper tray slightly, and then pull it out until it stops. Adjust the paper size dial to match the size and feed direction of paper in the paper tray.**

AUB250S

2. **Lift the front side of the tray, and then pull it out of the printer.**

AUB109S
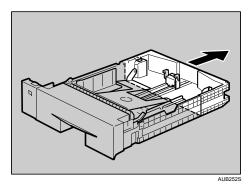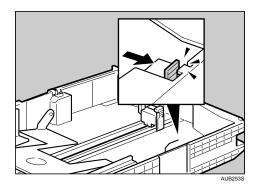
3. **If you load paper larger than A4▷, you should extend the tray as follows:**

4. **Slide the catches inwards to unlock the tray.**

AUB251S
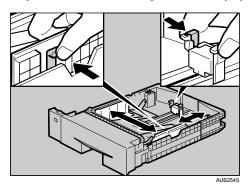
5. **Slide the tray until it stops.**

AUB252S
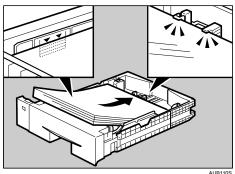
6. **Return the catches to their original positions.**

AUB253S
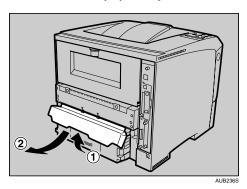
7. **Adjust the rear and side guides to the paper size you want to load.**

AUB254S

5

8. **Load paper into the tray with the print side down.**

AUB110S
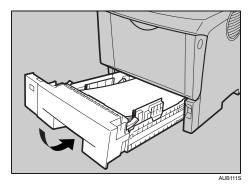
9. **If you extend the tray in Step 3, pull the bottom of the paper tray cover (①) up slowly, and then remove the paper tray cover (②), in the order shown in the illustration.**

AUB236S

10. **Lift the front side of the tray, and then place it into the printer. Carefully slide it into the printer until it stops.**

AUB111S
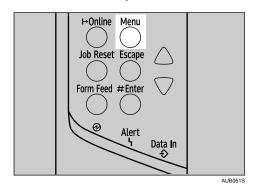
⤵ Note

- You cannot load paper smaller than A4▯, if the tray is extended. In this case, return the tray to its standard length.

Setting a paper size by using the control panel

If you want to use the paper size and feed direction that are not indicated on the paper size dial, set the dial to "✳". In this case, you should set the paper size using the control panel. Follow the procedure described below to set the paper size.

1. **Press the [Menu] key.**

AUB051S

The [Menu] screen appears.

2. **Press the [▲] or [▼] key to display [Paper Input], and then press the [# Enter] key.**

```
Menu:
  Paper Input
```

3. **Press the [▲] or [▼] key to display [Tray Paper Size], and then press the [# Enter] key.**

4. **Press the [▲] or [▼] key to display the target paper tray, and then press the [# Enter] key.**

```
Tray Paper Size:
  Tray 1
```

5. **Press the [▲] or [▼] key to display the loaded paper size, and then press the [# Enter] key.**

```
Tray 1:
  A5 (210x148)
```

After about two seconds, the display returns to the menu.

6. **Press the [Online] key.**
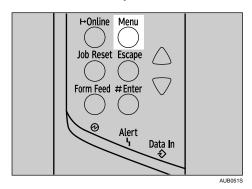
The initial screen appears.

This completes the setting change.

Specifying custom size paper for Tray 1 and the optional paper feed unit
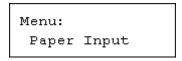
⭐ **Important**

- When printing on custom size paper, specify the paper size using the control panel or printer driver.

- The custom size paper selected using the printer driver overrides that selected using the control panel. Do not make settings using the control panel if you have already made settings using the printer driver. However, when printing with a printer driver other than the RPCS printer driver, you must configure the settings using control panel.

- The following is the range of paper sizes that can be loaded in each type of the paper trays:

  - Tray 1: 139.7 - 216 mm (5.5 - 8.5 in.) in width and 139.7 - 356 mm (5.5 - 14.01 in.) in length.

  - Optional Paper Feed Unit (Tray 2, Tray 3): 139.7 - 216 mm (5.5 - 8.5 in.) in width and 160 - 356 mm (6.3 - 14.01 in.) in length.

- The printer cannot print from applications that do not support custom size paper.

1. **Press the [Menu] key.**

AUB051S

The [Menu] screen appears.

2. **Press the [▲] or [▼] key to display [Paper Input], and then press the [# Enter] key.**

```
Menu:
  Paper Input
```

3. **Press the [▲] or [▼] key to display [Tray Paper Size], and then press the [# Enter] key.**

4. **Press the [▲] or [▼] key to display the target paper tray, and then press the [# Enter] key.**

```
Tray Paper Size:
  Tray 1
```

5. **Press the [▲] or [▼] key to display [Custom Size], and then press the [# Enter] key.**

6. **Press the [▲] or [▼] key to set horizontal value, and then press the [# Enter] key.**

   220-240V

```
Custom Size:
Horiz.   216.0 mm
```

120V

```
Custom Size:
Horiz.    8.50 "
```

By pressing the [▼] or [▲] key, the value increases or decreases by 0.1 mm (0.01 inch).

By pressing and holding the [▼] or [▲] key, the value varies by 1 mm (0.1 inch).

The screen for entering the length appears.

7. **Press the [▲] or [▼] key to set the vertical value, and then press the [# Enter] key.**

220-240V

```
Custom Size:
Vert.    297.0 mm
```

120V

```
Custom Size:
Vert.     14.00 "
```

After about two seconds, the display returns to the menu.

8. **Press the [Online] key.**

The initial screen appears.
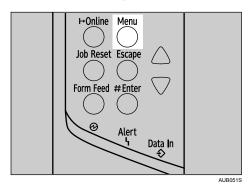
Specifying a paper type for Tray 1 and the optional paper feed unit

Improve printer performance by selecting the optimum paper type for the tray. You can select from the following paper types:

- Plain Paper, Recycled Paper, Special Paper, Color Paper, Letterhead, Preprinted, Thick Paper
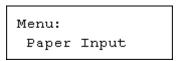
You can select custom paper type settings made using Web Image Monitor.

⭐ **Important**

- **Be sure to set a paper type using the control panel of the printer as the following procedure. If you set a paper type only by the printer driver, printing result might not be appropriate.**

1. **Press the [Menu] key.**

AUB051S

The [Menu] screen appears.

2. **Press the [▲] or [▼] key to display [Paper Input], and then press the [# Enter] key.**

```
Menu:
  Paper Input
```

3. **Press the [▲] or [▼] key to display [Paper Type], and then press the [# Enter] key.**

4. **Press the [▲] or [▼] key to select the tray, and then press the [# Enter] key.**

```
Paper Type:
  Tray 1
```

5. **Press the [▲] or [▼] key to select the paper type, and then press the [# Enter] key.**

```
Tray 1:
  Plain Paper
```

6. **Press the [Online] key.**

The initial screen appears.

🔽 **Note**
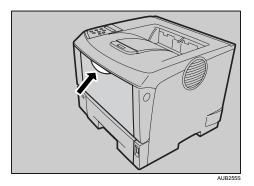
- The following paper types cannot be printed on both sides:
    - Special Paper, Color Paper, Preprinted, Thick Paper

Loading Paper in the Bypass Tray

⭐ **Important**
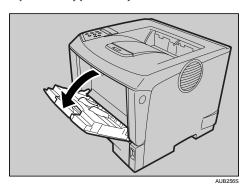
- **Shuffle the paper before loading the stack onto the tray, so multiple sheets are not fed in together.**
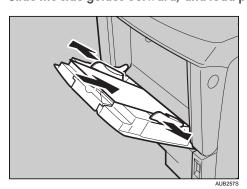
- Set the size and direction of the loaded paper on the control panel and with the printer driver. Make sure the settings do not conflict. Otherwise, the paper may jam or the print quality may be affected.

- Confirm that paper fits under the side guides.

- Sheets of A4$\square$ or 8$^1/_2$ × 11$\square$ length or longer must be loaded one at a time. Support the paper by hand so it feeds in properly. Additionally, since paper feeding and image quality may differ depending on paper thickness and width, check print results in advance using paper you intend to print on.

1. **Press the mark in the center of the Bypass Tray.**

AUB255S
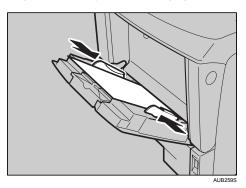
2. **Open the Bypass Tray.**

AUB256S

3. **Slide the side guides outward, and load paper until it stops with the print side up.**

AUB257S
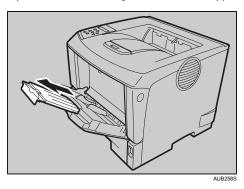
4. **Adjust the side guides to the paper width.**

AUB259S

Note
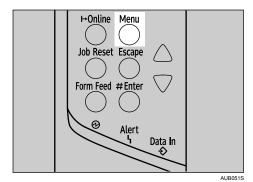
- 45 g/m^2 (12 lb.) paper or paper of A4 or 8^1/$_2$ × 11 or longer may not feed in properly unless it is cut at right angles.
- If you load B5 or larger, slide out the bypass tray extension.

AUB258S

Specifying standard size paper for the bypass tray

This describes how to load standard size paper into the bypass tray.

1. **Set the paper size using the control panel. Press the [Menu] key.**

AUB051S

The [Menu] screen appears.

2. **Press the [▲] or [▼] key to display [Paper Input], and then press the [# Enter] key.**

```
Menu:
  Paper Input
```

3. **Press the [▲] or [▼] key to display [Bypass Size], and then press the [# Enter] key.**

4. **Press the [▲] or [▼] key to select the paper size you want to set, and then press the [# Enter] key.**

220-240V

```
Bypass Size:
*A4 (210x297)
```

120V

```
Bypass Size:
*8 1/2 x 11
```

5. **Press the [Online] key.**

The initial screen appears.

⤓ Note
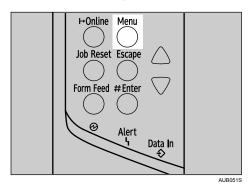
- To load thick paper, OHP transparencies, or envelopes, make settings for thick paper, envelope, or OHP transparencies using both the control panel and printer driver.

- The number of pages that can be loaded in the bypass tray differs depending on paper type. Make sure paper is not stacked above the paper guides inside the bypass tray.

Specifying custom size paper for the bypass tray

⭐ Important

- When loading custom size or special paper, specify the paper size using both the control panel and printer driver.

- Paper sizes between 139.7 - 432 mm (5.50 - 17.00 in.) in length and 64 - 216 mm (2.52 - 8.50 in.) in width can be loaded in the bypass tray. However, the size range varies depending on a type of printer drivers. For details, see the printer driver Help.

- Be sure to set a same size using both the control panel and the printer driver. If you set different size, printer error will occur.

- You cannot print on custom size paper with an application that does not support the custom size setting.

1. **Press the [Menu] key.**

AUB051S

The [Menu] screen appears.

2. **Press the [▲] or [▼] key to display [Paper Input], and then press the [# Enter] key.**

```
Menu:
  Paper Input
```

3. **Press the [▲] or [▼] key to display [Bypass Size], and then press the [# Enter] key.**

4. **Press the [▲] or [▼] key to display [Custom Size], and then press the [# Enter] key.**

5. **Press the [▲] or [▼] key to enter the horizontal value, and then press the [# Enter] key.**

220-240V

```
Custom Size:
  Horiz.   216.0 mm
```

120V

```
Custom Size:
  Horiz.     8.50 "
```

By pressing the [▼] or [▲] key, the value increases or decreases by 0.1 mm (0.01 inch).

By pressing and holding the [▼] or [▲] key, the value varies by 1 mm (0.1 inch).

You can set the horizontal value in the following range: 64 - 216 mm (2.52 - 8.50 inches).

6. **Press the [▲] or [▼] key to enter the vertical value, and then press the [# Enter] key.**

220-240V

```
Custom Size:
  Vert.    150.0 mm
```

120V

```
Custom Size:
Vert.     17.00 "
```

You can set the vertical value in the following range: 139.7 mm - 432 mm (5.50 -17.00 inches).

7. **Press the [Online] key.**

The initial screen appears.

🗉 Reference

- The printer driver Help
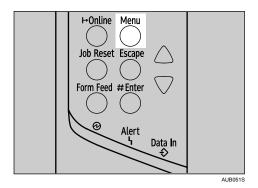
Specifying a paper type for the bypass tray

By selecting the paper type you want to load, the printer performs better. You can select from the following paper types:

- Plain Paper, Recycled Paper, Special Paper, Color Paper, Letterhead, Transparency (OHP transparency), Envelope, Preprinted, Thick Paper

You can select custom paper type settings made using Web Image Monitor.

⭐ Important

- Be sure to select the paper type when you load thick paper, envelopes, or OHP transparencies in the bypass tray.

- The paper type selected using the printer driver overrides that selected using the control panel.

- Be sure to set a paper type using the control panel of the printer as the following procedure. If you set a paper type only by the printer driver, printing result might not be appropriate.

1. **Press the [Menu] key.**

AUB051S

The [Menu] screen appears.

2. **Press the [▲] or [▼] key to display [Paper Input], and then press the [# Enter] key.**

```
Menu:
  Paper Input
```

3. **Press the [▲] or [▼] key to display [Paper Type], and then press the [# Enter] key.**

4. **Press the [▲] or [▼] key to display [Bypass Tray], and then press the [# Enter] key.**

5. **Press the [▲] or [▼] key to select the paper type, and then press the [# Enter] key.**

```
Bypass Tray:
*Plain Paper
```

6. **Press the [Online] key.**

   The initial screen appears.

⬇ Note

- The following paper types cannot be printed on both sides:
  - Special Paper, Color Paper, Transparency (OHP transparency), Envelope, Preprinted, Thick Paper

Loading Envelopes

As there are many kinds of envelopes, be sure to check if those to be used are supported by this printer.

🔖 Reference
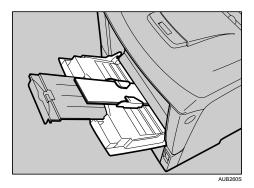
- p.25 "Attaching Envelope Feeder Type 400"
- p.78 "Types of Paper and Other Media"

Loading envelopes onto the bypass tray
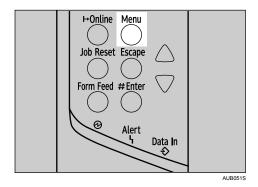
⭐ Important

- Confirm that the envelope flaps are securely folded down, and that there is no air inside the envelopes.

1. **Load envelopes until they stop, with the print side up and the sides of the flaps on the left as shown below.**

AUB260S

2. **Slide the side guides against the edge of the envelope stack.**

3. **Set the envelope size and feed direction. Press the [Menu] key.**

AUB051S

The [Menu] screen appears.

4. **Press the [▲] or [▼] key to display [Paper Input], and then press the [# Enter] key.**

```
Menu:
  Paper Input
```

5. **Check [Bypass Size] appears, and then press the [# Enter] key.**

6. **Press the [▲] or [▼] key to select the envelope type, and then press the [# Enter] key.**

```
Bypass Size:
  C5 Env(162x229)
```

7. **Press the [Online] key.**

The initial screen appears.

�'t Note

• Confirm that the top of the stack is not higher than the limit mark on the side guides.

- Do not push the stack of envelopes with too much force.

- Confirm that the edges of envelopes fit under the side guides.

⊟ Reference

- p.78 "Types of Paper and Other Media"
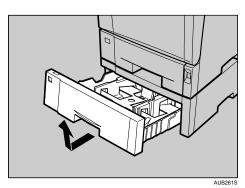
Loading envelopes into the envelope feeder unit

The following explanation uses the example of installing the envelope feeder unit in "Tray 2".
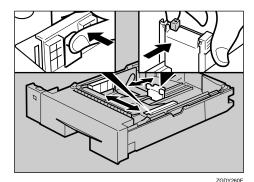
⭐ Important

- Even if the optional envelope feeder is not installed, you can select envelope sizes for Tray 2 and Tray 3 using the control panel. However, you cannot load envelopes until the optional envelope feeder unit is installed.

- With the optional envelope feeder unit, you can load up to 60 envelopes at the same time.

- Confirm that the envelope flaps are securely folded down, and that there is no air inside the envelopes.

- Do not slide the paper tray in with force. If you do, the front and side guides might move.

1. **Pull the optional paper feed unit (Tray 2) out until it stops. Then, lift it slightly, and then slide it out.**

AUB261S
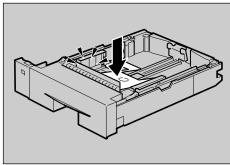
2. **Prepare the envelope feeder unit.**

3. **Pinch the side guides, and then slide them outward until they stop. Pinch the rear guide, and then slide it toward the back.**

ZGDY260E
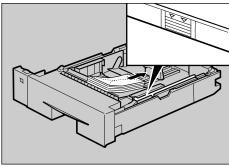
4. **Push the bottom plate down until it locks into place.**
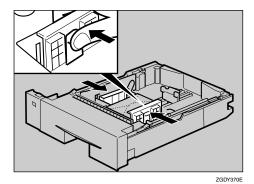
ZDDP360E

5. **Load envelopes into the envelope feeder unit, with the print side down and the flap on the left as shown in the illustration.**
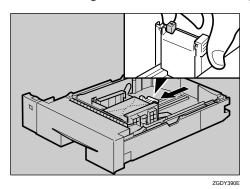
ZDDP380E
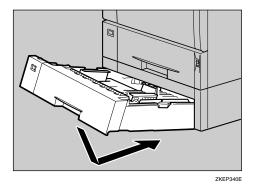
6. **Pinch the side guides, and then slide them along the edge of the envelope stack.**

ZGDY370E
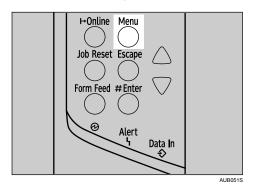
7. **Pinch the rear guide, and then slide it along the edge of the envelope stack.**

5

ZGDY390E

8. **Lift the front of the tray, and then slide it carefully into the printer until it stops.**

ZKEP340E
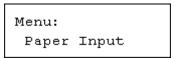
9. **Press the [Menu] key.**

AUB051S

The [Menu] screen appears.

10. **Press the [▲] or [▼] key to display [Paper Input], and then press the [# Enter] key.**

```
Menu:
  Paper Input
```

11. **Press the [▲] or [▼] key to display [Tray Paper Size], and then press the [# Enter] key.**

12. **Press the [▲] or [▼] key to select [Tray 2] or [Tray 3], and then press the [# Enter] key.**

13. **Press the [▲] or [▼] key to select the envelope type, and then press the [# Enter] key.**

```
Tray 2:
  C5 Env(162x229)
```

14. **Press the [Online] key.**

The initial screen appears.

♦ Note

- Confirm that the top of the stack is not higher than the limit mark on the side guides.
- Confirm that the envelopes fit under the side guides.
- Do not push the stack of envelopes with too much force.
- Keep the removed paper tray with paper in a cool and dry place.

🖹 Reference
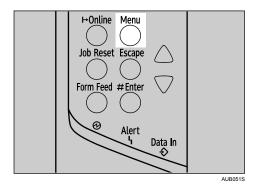
- p.78 "Types of Paper and Other Media"

Switching Between Paper Trays

When paper of the same size is loaded in both the Tray1 and the paper feed unit (option), and when [Aut. Tray Select] is set with the printer driver, paper will be fed from the Tray1 when you start printing. To print

on paper loaded in the paper feed unit, switch the tray to be used to the paper feed unit using [Tray Priority] in the [Paper Input] Menu.

1. **Press the [Menu] key.**

AUB051S

The [Menu] screen appears.

2. **Press the [▲] or [▼] key to display [Paper Input], and then press the [# Enter] key.**

```
Menu:
  Paper Input
```

3. **Press the [▲] or [▼] key to display [Tray Priority], and then press the [# Enter] key.**

4. **Press the [▲] or [▼] key to select the tray type you want to use, and then press the [# Enter] key.**

```
Tray Priority:
*Tray 1
```

5. **Press the [Online] key.**

The initial screen appears.

6. Replacing Consumables and Maintenance Kit

Replacing the Toner Cartridge (Print Cartridge)

⚠ WARNING

- Do not incinerate spilled toner or used toner. Toner dust is flammable and might ignite when exposed to an open flame.
- Do not store toner, used toner, or toner containers in a place with an open flame. The toner might ignite and cause burns or a fire.

⚠ CAUTION

- Keep toner (used or unused) and the toner cartridge out of reach of children.
- If toner or used toner is inhaled, gargle with plenty of water and move into a fresh air environment. Consult a doctor if necessary.
- If your skin comes into contact with toner or used toner, wash the affected area thoroughly with soap and water.
- If toner or used toner gets into your eyes, flush immediately with large amounts of water. Consult a doctor if necessary.
- Disposal should take place at an authorized dealer or an appropriate collection site.
- If you dispose of the used toner cartridges yourself, dispose of them according to local regulations.
- If toner or used toner is swallowed, dilute by drinking a large amount of water. Consult a doctor if necessary.
- Avoid getting toner on your clothes or skin when removing a paper jam or replacing toner. If your skin comes into contact with toner, wash the affected area thoroughly with soap and water.
- If toner gets on your clothing, wash with cold water. Hot water will set the toner into the fabric and may make removing the stain impossible.
- Keep toner (used or unused) and the toner bottle out of reach of children.

⭐ **Important**

- Do not expose the toner cartridge to light for a long time. Do not leave the front cover open for a long time. If the toner cartridge is exposed to a light for a long time, the toner cartridge might be damaged and print quality might be reduced. Replace the toner cartridge immediately.
- The toner cartridge packaged with the printer can print up to 6,000 pages when it is compliant with ISO/IEC 19752 and the image density is set as the factory default. ISO/IEC 19752 is an international standard on measurement of printable pages, set by the International Organization for Standardization.

6

- When handling toner cartridges, never stand them up on either end or position them upside down.

- Store toner cartridges in a cool dark place.

- Do not use chemical cleaner or organic solvent such as thinner or benzine.

- Actual printable numbers vary depending on image volume and density, number of pages printed at a time, paper type and size, and environmental conditions such as temperature and humidity. Toner quality degrades over time. You may have to replace the toner cartridge prematurely. We recommend you prepare a new toner cartridge beforehand.

- The new toner cartridge can print up to 15,000 pages.

- The life span of pages the toner cartridge can print vary depending on the depletion of toner and the cartridge parts. The actual number of printed pages you can print from a particular toner cartridge depends on the paper type, size, orientation, the contents of your print images, number of printout from a print job, and printing environment conditions. Toner cartridges may need to be changed sooner than indicated above due to deterioration over the period of use.

- If the following problems occur even with toner still remaining, the fusing part of the toner cartridge is deteriorated over the period of use. Prepare a new toner cartridge.

  - Areas of printout are missing.

  - The print out image is missing or partially blurred.

  - White streaks appear.

  - The whole printout is blemished.

  - Images are blurred.

When to replace the toner cartridge

If the following message appears, approximately 200 sheets can still be printed until the "Replace Print Cartridge" message is displayed:

```
Replace Print
Cartridge soon
```

If the following message appears, replace the toner cartridge.
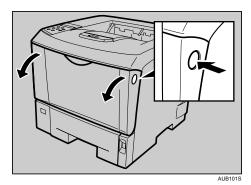
```
Replace
Print Cartridge
```

⭐ **Important**
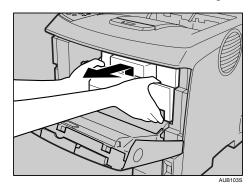
- Do not put the toner cartridge on an unstable or tilted surface.

- Be sure to remove the tape completely before installing the new toner cartridge, otherwise the printer might be damaged.

- Keep the toner cartridge horizontal when pulling out the toner tape. pulling out the toner with the cartridge upright or tilted can cause printer failure.
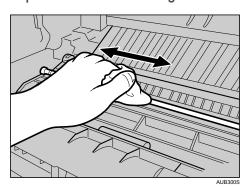
• Be careful not to get toner dust on your hands or clothes.

1. **Open the front cover by pushing the front cover release button.**
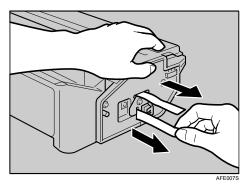
AUB101S

2. **Lift the front side of the toner cartridge, and then pull it out of the printer.**

AUB103S
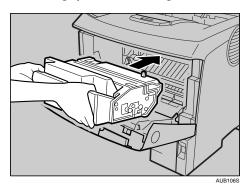
3. **Be sure to put the toner cartridge on a stable, flat surface.**
4. **Wipe around the metallic registration roller by turning with a soft damp cloth.**
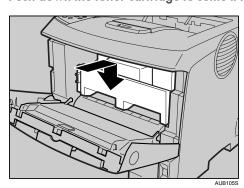

AUB300S

5. **Take the new toner cartridge from the box.**

6. **Place the toner cartridge on a flat surface. Pull out the tape inside the unit horizontally while holding the cartridge with one hand as shown in the illustration.**

AFE007S

7. **Hold the grips of the cartridge, and then insert it into the printer until it stops.**

AUB106S
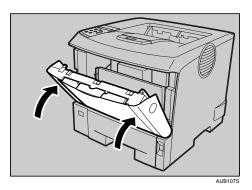
8. **Push down the toner cartridge to settle it in appropriate position.**

AUB105S

6

9. **Close the front cover.**

AUB107S

10. **Wait while the toner loads.**

   To avoid malfunction, do not turn off the power until "Ready" appears on the display.

⬇**Note**

- Do not shake or shock the toner cartridge after pulling out the toner seal to avoid dirt on paper surfaces, toner spillage, or printer failure.

- Please cooperate with the Toner cartridge Recycling Program, whereby are collected used toner cartridges. For details, consult with the store where the printer was purchased or with a sales or service representative.

- Do not close the front cover with force. If you cannot close the cover easily, pull out the toner cartridge from the printer and insert it again. After that, close the front cover again.

Replacing the Maintenance Kit

⚠ CAUTION

- The inside of this printer becomes very hot. Do not touch parts labeled "⚠" (indicating a hot surface). Touching these parts will result in burns.

- Grip the plug, not the cord, when pulling the plug from the socket. Pulling the cord causes wear and tear that can result in fire or electric shock.

- Wait at least one hour after power off before replacing parts. Not allowing the printer to cool may result in burns.

When to replace the Maintenance Kit.

"Replace Maintenance Kit"

The maintenance kit contains parts for maintaining the printer.
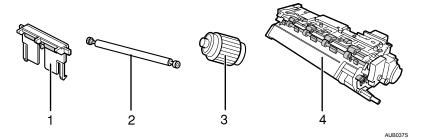
Replace the maintenance kit if the following message appears on the display:

```
Replace
Maintenance Kit
```

Before Replacing

Replace all the parts included in Maintenance Kit at the same time. Replace them according to the following procedure.

1. **Turn off the power, and then unplug the power cable.**
2. **Check the box contains the following items:**

AUB037S

1. **Friction Pad × 3**

   See "Replacing the Friction Pad".

2. **Transfer Roller (with gloves)**

   See "Replacing the Transfer Roller".

3. **Paper Feed Roller × 3**

   See "Replacing the Paper Feed Roller".
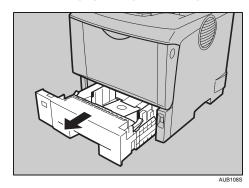
4. **Fusing Unit**

   See "Replacing the Fusing Unit".
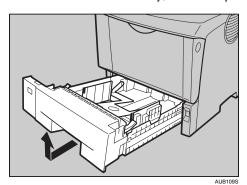
Replacing the Friction Pad
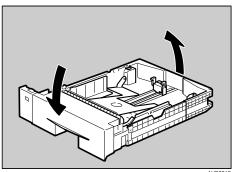
Replace all the friction pads in the tray. The following procedure shows how to replace the tray's friction pad (Tray 1) and the other are for the paper feed unit(s) (Tray 2, 3).

1. **Pull out the paper tray until it stops.**

AUB108S

2. **Lift the front side of the tray, and then pull it out of the printer.**

AUB109S

6

3. **Remove paper from the paper tray. Place the tray upside down on a flat surface.**

AUB321S
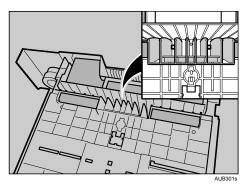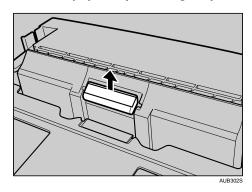
4. **Use a sharp-pointed item like a ball-point pen, to release the two catches that lock the friction pad.**

AUB301s

The friction pad may fall off when the catches are released. Place your hand over the friction pad while releasing the catches.

5. **Return the paper tray to its original position, and then remove the friction pad from the tray.**

AUB302S
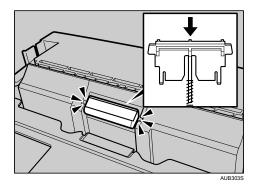
6. **Insert the new friction pad in the paper tray.**

Attach the central projection of the new friction pad to the spring, and then align the projection of both sides of the friction pad with the holes of the paper tray. Then push the friction pad as shown in the illustration until it clicks.

AUB303S

After pushing in the friction pad, press on it several times to check it is properly installed. If it jumps back into position due to the force of the spring, it is properly installed.
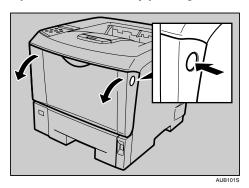
7. **Push the friction pad until it locks securely.**

8. **Repeat the replacement procedure for any optional paper feed units that are installed.**

⬇Note
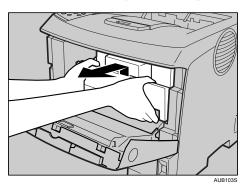
- The friction pad spring may come off. Be careful not to lose the friction pad spring.

- The catches that lock the friction pad are located at the very back.

Replacing the Transfer Roller

⭐Important
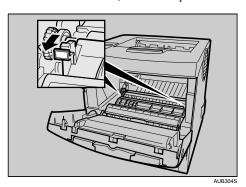
- Do not insert the roller on the back of the socket. Doing so can damage the printer.

- Insert the metallic part of the roller on the socket. If you insert the sponge part of the roller, the roller might be damaged.

1. **Open the front cover by pushing the front cover release button.**

AUB101S

2. **Pull the toner cartridge out of the printer, while raising the front side.**

AUB103S
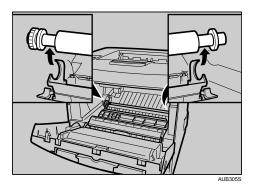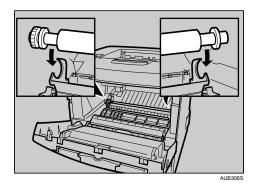
3. **To avoid dirtying your hands with toner from the transfer roller, wear the gloves included in the Maintenance Kit.**

4. **Hold the lock levers, and then pull them.**

AUB304S
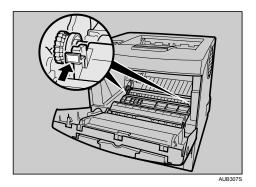
5. **Hold the green parts of the roller on both sides, and remove the roller from the printer, as shown in the illustration.**

AUB305S
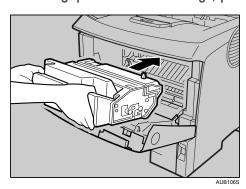
6. Insert the new transfer roller on the socket with the gear of the roller positioned to the left.

AUB306S
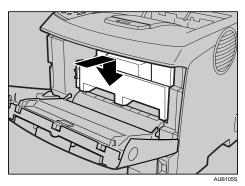
7. Push down the lock levers on both ends of the printer as shown in the illustration, until they click into place.

AUB307S
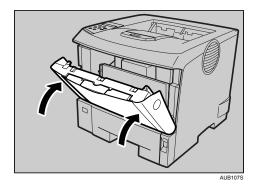
8. Take the gloves off.

9. Hold the grips of the toner cartridge, push it into the printer until it stops.

AUB106S

10. **Push down the toner cartridge to settle it in appropriate position.**

AUB105S

11. **Close the front cover.**

AUB107S

⬇ Note

- Be sure to place the used cartridge on the level place.
- When the transfer roller is set, the transfer roller cover will return to its original position automatically.

Replacing the Paper Feed Roller

Replace all feed rollers including the printer and the optional paper feed unit(s). The following procedure shows how to replace the paper feed rollers of the printer and the optional paper feed units.
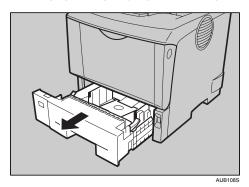
⚠CAUTION

- When lifting the machine, use the inset grips on both sides. Otherwise the printer could break or cause injury if dropped.
- When lifting the paper feed unit, hold the bottom of it, and then lift it slowly. Lifting it carelessly or dropping it may cause an injury.
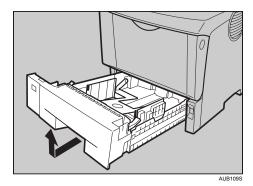
⭐Important

- **Always move the printer horizontally. Turning the printer sideways or tilting it backward or forward while moving will result in toner leakage.**
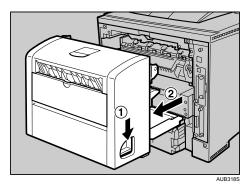
- Do not put the printer on an unstable or sloped surface.

- Be sure to move the printer horizontally. Moving the printer up and down may cause toner to scatter.

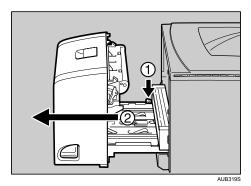1. **Lift the paper tray slightly, and then pull it out until it stops.**

AUB108S

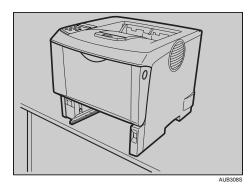2. **Lift the front side of the tray, and then pull it out of the printer.**

AUB109S

3. **If the optional duplex unit is attached, push down the lever on the right side of the duplex unit (①), and then pull it out until it stops (②).**
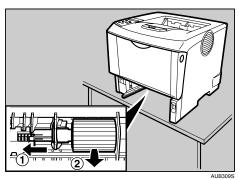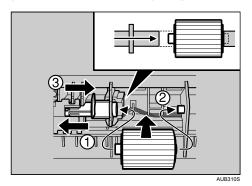

AUB318S

4. **Push the under board levers (①), and then pull the duplex unit out of the printer (②).**

AUB319S

5. **Move the printer to the edge of a sturdy and stable table or desk.**

AUB308S

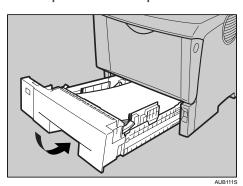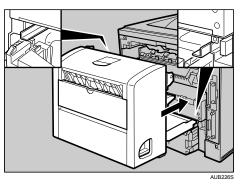6. **Slide the green lock lever to the left (①), and then remove the paper feed roller (②).**

AUB309S

7. **While sliding the green lock lever to the left (①), set the new roller (②). Then, return the green lock lever to its original position (③).**
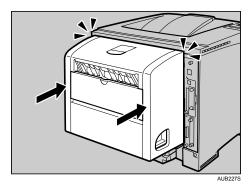

AUB310S

Confirm the green lock lever secures the roller correctly by checking that sure the new roller rotates smoothly.

8. **If the printer is equipped with the optional paper feed unit(s), follow the same procedure to replace its paper feed roller.**

If you installed two paper feed units, also replace both their paper feed rollers.

9. **Place paper in the removed paper trays. Lift the front of the tray, and then slide it carefully into the printer until it stops.**

AUB111S

10. **When the optional duplex unit was removed, push in the duplex unit along the rails in the back of the printer.**

AUB226S

11. **Securely push the duplex unit into the printer.**

AUB227S

Note

- If the printer is equipped with the optional paper feed unit, do not move the printer and the unit together, because they are not securely attached.
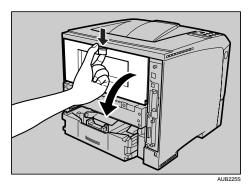
Reference

- p.185 "Moving and Transporting the Printer"
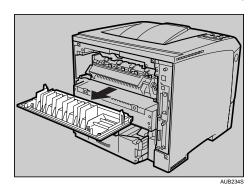
Replacing the Fusing Unit

⚠ CAUTION

- The fusing unit becomes very hot. When installing a new fusing unit, turn off the printer and wait at least an hour before replacing the old fusing unit. Not allowing the unit to cool may result in burns.
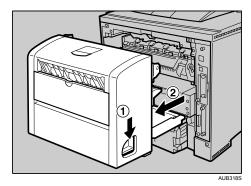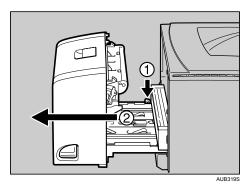
1. **Open the rear cover.**

AUB225S

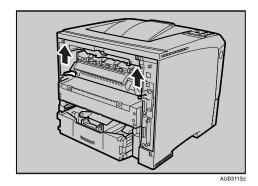2. **Lower the rear cover until it is horizontal, and then pull it away.**

AUB234S

3. **If the optional duplex unit is attached, push down the lever on the right side of the duplex unit (①), and then pull it out until it stops (②).**
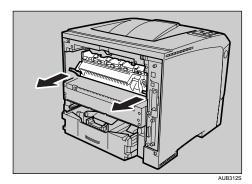

AUB318S
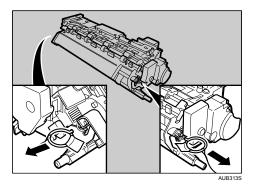
4. **Push the under board levers ($①$), and then pull the duplex unit out of the printer ($②$).**

AUB319S

5. **Lift the lock levers of the fusing unit as shown in the illustration.**

AUB311Sz
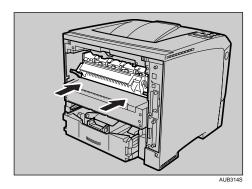
6. **Pull the fusing unit out.**

AUB312S
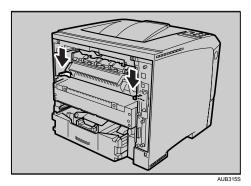
7. **Pull out the pins on both sides of the new fusing unit.**

AUB313S
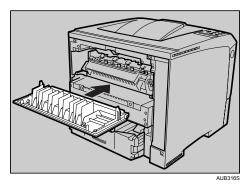
8. **Push the new fusing unit into the printer.**

AUB314S

9. **Push the lock levers of the fusing unit down until they click.**

AUB315S

10. **Position the rear cover horizontally and align it with the grooves in the printer's interior.**

AUB316S
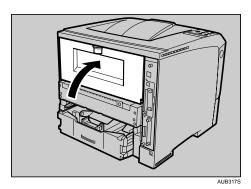
11. **Close the rear cover.**

AUB317S

12. **When the optional duplex unit was removed, push in the duplex unit along the rails in the back of the printer.**

AUB226S

13. Securely push the duplex unit into the printer.

AUB227S

14. Print a configuration page to confirm that the printer works properly.

🔖 Reference

- "Print the Test Page", Quick Installation Guide.

6

6

7. Cleaning the Printer

Cautions to Take When Cleaning
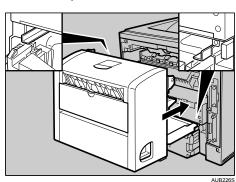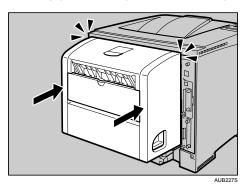
⚠ WARNING

- Do not remove any covers or screws other than those specified in this manual. Some parts of the machine are at a high voltage and could give you an electric shock. Also, if the machine has laser systems, direct (or indirect) reflected eye contact with the laser beam may cause serious eye damage. When the machine needs to be checked, adjusted, or repaired, contact your service representative.

- Do not take apart or attempt any modifications to this machine. There is a risk of fire, electric shock, explosion or loss of sight. If the machine has laser systems, there is a risk of serious eye damage.

⚠ CAUTION

- When removing misfed paper, do not touch the fusing unit because it could be very hot.

Clean the printer periodically to maintain fine printing.

Dry wipe the exterior with a soft cloth. If dry wiping is not enough, wipe with a soft, wet cloth that is wrung out well. If you still cannot remove the stain or grime, use a neutral detergent, and then wipe over with a well-wrung wet cloth, dry wipe, and let it dry.

⭐ Important

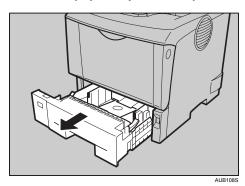- To avoid deformation, discoloration, or cracking, do not use volatile chemicals, such as benzine and thinner, or spray insecticide on the printer.

- If there is dust or grime inside the printer, wipe with a clean, dry cloth.

- You must disconnect the plug from the wall outlet at least once a year. Clean away any dust and grime from the plug and outlet before reconnecting. Accumulated dust and grime pose a fire hazard.

Cleaning the Friction Pad
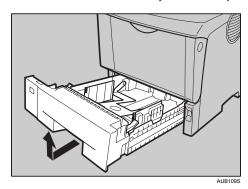
If the friction pad is dirty, a multi-feed or a misfeed might occur. In this case, clean the pad as follows:

⭐ **Important**

- **Do not use chemical cleaner or organic solvent such as thinner or benzine.**

- **Do not slide the paper tray in with force. If you do, the front and side guides might move.**

1. **Pull out the paper tray until it stops.**

AUB108S

2. **Lift the front side of the tray, and then pull it out of the printer.**

AUB109S
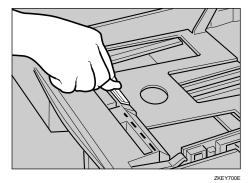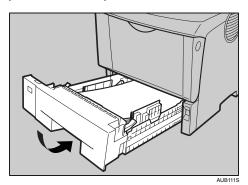
3. **Place the tray on a flat surface. When there is paper in the tray, remove paper.**

4. **Wipe the friction pad with a soft damp cloth. Then, wipe it with a dry cloth to remove the water.**

ZKEY700E

5. **Load paper into the paper tray with the print side up. Carefully slide the paper tray into the printer until it stops.**

AUB111S

◆ Note

- If misfeeds or multi-feeds of paper occur after cleaning the friction pad, contact your sales or service representative.

- Follow the same procedure to clean the friction pad of the optional paper feed unit and the envelope feeder unit.

7
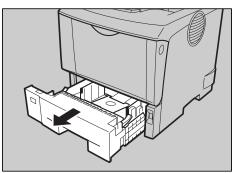
Cleaning the Paper Feed Roller

If the paper feed roller is dirty, a misfeed might occur. In this case, clean the roller as follows:

⚠️CAUTION
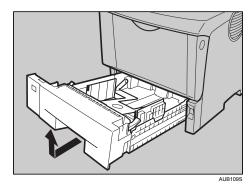
- When lifting the printer, use the grips on both sides of the printer, otherwise the printer might fall and cause personal injury.

- When you move the printer, unplug the power cord from the wall outlet to avoid a fire or an electric shock.

- When you pull out the plug from the socket, grip the plug to avoid damaging the cord and causing a fire or an electric shock.

⭐ **Important**

- **If the printer is equipped with the optional paper feed unit, do not move the printer and unit together as they are not securely attached.**

- **When lifting the printer, confirm that the optional paper feed unit is not attached to the printer.**

- **Do not use chemical cleaner or organic solvent such as thinner or benzine.**

- **Do not slide the paper tray in with force. If you do, the front and side guides might move.**

1. **Turn off the power.**
2. **Pull out the plug from the socket. Remove all the cables from the printer.**
3. **Pull out the paper tray until it stops.**
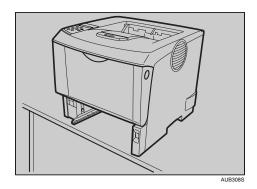
AUB108S

4. **Lift the front side of the tray, and then pull it out of the printer.**


AUB109S
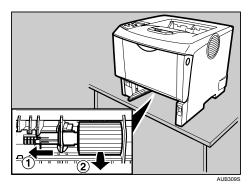
5. **Move the printer to the edge of a stable table or desk.**

AUB308S
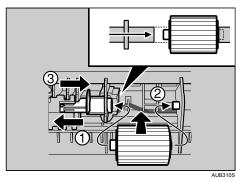
Do not put the printer on an unstable or tilted surface.

6. **Slide the green lock lever to the left (①), so that the paper feed roller can be released (②).**

AUB309S
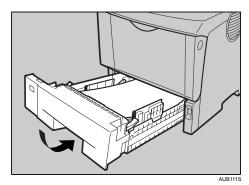
7. **Wipe the rubber part of the roller with a soft damp cloth. Then, wipe it with a dry cloth to remove the water.**

8. **While sliding the green lock lever to the left (①), set the paper feed roller to its original position (②). After that, return the green lock lever to its original position (③).**

AUB310S

Check the green lock lever secures the roller correctly by making sure the new roller rotates smoothly.

9. **Move the printer to the place where it was placed. Carefully slide the paper tray into the printer until it stops.**

AUB111S

🔽**Note**

- Follow the same procedure to clean the paper feed roller of the optional paper feed unit.

Cleaning the Registration Roller

If the registration roller is dirty, a misfeed might occur. In this case, clean the roller as follows:

⚠ WARNING

- Be sure to turn off the power switch and wait for about 15 minutes before cleaning the Registration roller. Not waiting for the printer to cool down can result in a burn.
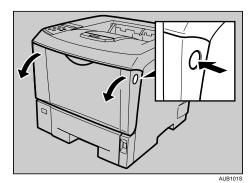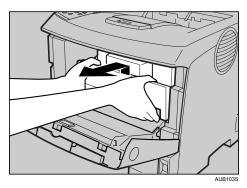
⚠ CAUTION

- The inside of this printer becomes very hot. Do not touch parts labeled "⚠" (indicating a hot surface). Touching these parts will result in burns.

Clean the registration roller if dots (caused by specks of paper stuck to the roller) appear on printed OHP transparencies.
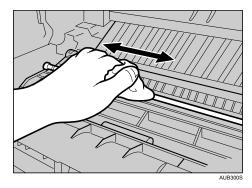
⭐ Important

- Do not hold the toner cartridge upside down or stand it vertically.

- Do not put the toner cartridge on an unstable or tilted surface.

- Do not use chemical cleaners or organic solvents such as thinners or benzine.

1. Turn off the power, and then unplug the power cable.

2. Open the front cover by pushing the front cover release button.
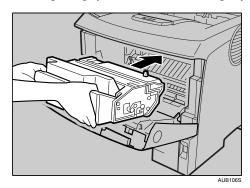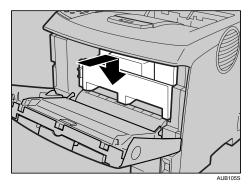
AUB101S

3. **Pull the toner cartridge out of the printer by holding the grips of the cartridge.**

AUB103S

4. **Wipe around the metallic Registration roller by turning with a soft damp cloth.**

AUB300S

5. **Holding the grips of the toner cartridge, push it into the printer until it stops.**

AUB106S

6. **Push down the toner cartridge to settle it in appropriate position.**
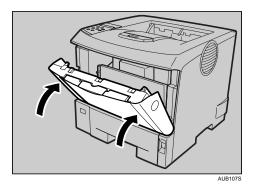
AUB105S

7. **Close the front cover.**

AUB107S

🔻**Note**

- Carefully close the front cover. If you cannot close the cover easily, pull the toner cartridge out of the printer and insert it again. After that, close the front cover again.

7
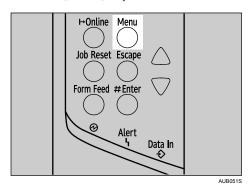
8. Adjusting the Printer

Adjusting the Image Density

You can adjust the image density using the control panel if the image density is not appropriate.

⭐ **Important**

- Extreme settings may create printouts that appear dirty.

- Image Density settings should be made from the application or the printer driver whenever possible.

1. **Press the [Menu] key.**

AUB051S

The [Menu] screen appears.

2. **Press the [▲] or [▼] key to display [Maintenance], and then press the [# Enter] key.**

```
Menu:
  Maintenance
```

3. **Press the [▲] or [▼] key to display [Image Density], and then press the [# Enter] key.**

```
Maintenance:
  Image Density
```

4. **Press the [▲] or [▼] key to specify the image density, and then press the [# Enter] key.**

```
Image Density:
(-3 +3)        0
```

You can specify the image density in the range of -3 to +3.

5. **Press the [Online] key.**

The initial screen appears.

↓Note
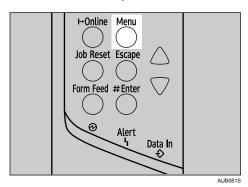
- To maintain a darker image under high volume printing conditions, Selecting 3 from the control panel is highly recommended.

- You can adjust the image density in seven steps from -3 to +3. Increasing the value makes the printouts darker and decreasing the value makes the printouts lighter.

8

Adjusting Tray Registration

You can adjust the registration of each tray. The vertical adjustment is used for all trays. Normally, you need not update the registration. But when the optional paper feed unit or the duplex unit is installed, updating is useful in some cases.

1. **Press the [Menu] key.**

AUB051S

The [Menu] screen appears.

2. **Press the [▲] or [▼] key to display [Maintenance], and then press the [# Enter] key.**

```
Menu:
   Maintenance
```

3. **Press the [▲] or [▼] key to display [Registration], and then press the [# Enter] key.**
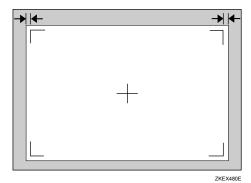
```
Maintenance:
   Registration
```

4. **Press the [▲] or [▼] key to display [Prt. Test Sheet], and then press the [# Enter] key.**

```
Registration:
   Prt. Test Sheet
```

5. **Press the [▲] or [▼] key to select the tray you want to adjust, and then press the [# Enter] key.**

Print the test sheet to preview the settings.

141

6. **Confirm the position of the image on the test sheet, and then adjust the registration value.**

ZKEX480E

In this setting, adjust the margins of the test sheet so that they are equal in size.

7. **In the [Registration] menu, press the [▲] or [▼] key to select [Adjustment], and then press the [# Enter] key.**

```
Registration:
 Adjustment
```
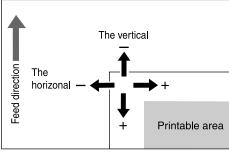
8. **Press the [▲] or [▼] key to select the parameter you want to adjust, and then press the [# Enter] key.**

```
Adjustment:
  Vert: Tray 1
```

9. **Press the [▲] or [▼] key to set the registration value (mm), and then press the [# Enter] key.**

```
Vert: Tray 1:
 (-4.0 +4.0) 0.0
```

Increase the value to shift the print area in the positive direction, and decrease to shift in the negative direction.

TS3X001N

Pressing the [▲] or [▼] key makes the value increase or decrease by 1.0 mm steps.

10. **Press the [# Enter] key.**

The display returns to the print area [Adjustment] menu.

```
Registration:
  Adjustment
```
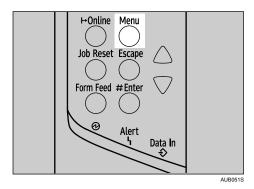
11. **Print the test sheet to confirm the adjustment result.**

12. **Press the [Online] key.**

The initial screen appears.

Reducing Paper Curl

Follow the procedure below to reduce paper curl.

1. **Push the [Menu] key.**

AUB051S

The [Menu] screen appears.

2. **Press the [▲] or [▼] key to display [Maintenance], and then press the [# Enter] key.**

```
Menu:
  Maintenance
```

3. **Press the [▲] or [▼] key to display [Curl Prevention], and then press the [# Enter] key.**

```
Maintenance:
  Curl Prevention
```

4. **Press the [▲] or [▼] key to set [On] or [Off], and then press the [# Enter] key.**

```
Curl Prevention:
*Off
```

Wait for two seconds. The display returns to the [Maintenance] menu.

5. **Press the [Online] key.**

The initial screen appears.

9. Troubleshooting

Error & Status Messages on the Control Panel

This section describes the main messages that appear on the display. If a message that is not described here, follow its instructions.

Status Messages

Ready

This is the default ready message. The machine is ready for use. No action is required.

Processing...

The machine is printing. Wait a while.

Waiting...

The machine is waiting for the next data to print. Wait a while.

Offline

The machine is offline. To start printing, switch the machine to online by pressing the [Online] key on the control panel.

Warming up...

The printer is warming up or toner is being supplied. Wait until "Ready" appears on the display.

Resetting Job...

The machine is resetting the print job. Wait until "Ready" appears on the display.

Setting change in process

The machine is changing settings. Wait a while.

Suspending...

All jobs in the machine are suspended. Wait a while.

Hex Dump Mode

In the hex dump mode, the machine receives data in hexadecimal format. Turn off the machine after printing, and then turn back on.

Messages (in alphabetical order)

Call Service: EC Power Off On/Call Service if error reoccurs

A communication error was sent from the engine to the controller.

- Turn the power off, and then on. If the message appears again, contact your sales or service representative.

Cannot check Signal in Ad hoc

An attempt to check the radio signal was made while the communication mode was set to [802.11 Ad hoc] in the [Maintenance] menu.

- To check the radio signal, select Infrastructure in the communication mode settings.
- See p.61 "IEEE 802.11b (Wireless LAN) Configuration".

Cannot duplex Tray

The selected tray is set to one sided tray when duplex mode is set.

- Cancel duplex mode. Alternatively, press the [Form Feed] key to select another tray, or cancel the job.
- Contact the machine administrator.

Certificate auto renewal failed

Renewing the certificate automatically has failed.

- Call your service provider.

Change Setting Tray #/Paper Size: Paper Type

The printer detected that the actual paper type was not the same as the paper tray size and paper type setting.

- Change the paper type via the paper type setting menu on the control panel or execute Form Feed by pressing the [Form Feed] key, or cancel the job.
- Load the indicated tray with the correct paper, or change the paper type/size using the dial or using the [Paper Input] menu on the control panel. Alternatively, select another tray by pressing the [Form Feed] key, or cancel the job.

DHCP assigned Cannot change

An attempt to change the IP address, subnet mask or gateway address was made while [DHCP] was set to [On].

- Make the change after setting [DHCP] to [Off].

Error: Enter 10 or 26 characters

The entered number of characters for the WEP Key (hexadecimal entry) is incorrect.

- Enter the correct WEP key.
- See p.61 "IEEE 802.11b (Wireless LAN) Configuration".

Error: Enter 5 or 13 characters

The entered number of characters for the WEP Key (ASCII entry) is incorrect.

- Enter the correct WEP key.
- See p.61 "IEEE 802.11b (Wireless LAN) Configuration".

Hardware Problem Ethernet

The printer detected an ethernet error.

- Turn the power off, and then on. If the message appears again, contact your sales or service representative.

Hardware Problem HDD

The printer identified a HDD Board error.

- Turn the power off, and then on. Remove and re-install the HDD board correctly. If the message appears again, contact your sales or service representative.
- See p.27 "Attaching Hard Disk Drive Type 2650".

Hardware Problem Option RAM

The printer detected an optional RAM error.

- Turn the power off, and then on. Remove and re-install the optional RAM. If the message appears again, contact your sales or service representative.
- See p.29 "Attaching Memory Unit Type C 128MB/256MB (SDRAM Module)".

Hardware Problem Parallel I/F

The printer identified a parallel interface error.

- Check the correct interface cable being used.
- Turn the power off, and then on. If the message appears again, contact your sales or service representative.

Hardware Problem Printer font

The printer identified a printer font file error.

- It is necessary to replace the printer font module.

Hardware Problem USB

The printer identified a USB I/F Board error.

- Turn the power off, and then on. If the message appears again, contact your sales or service representative.

Hardware Problem Wireless Board

Access to the IEEE 802.11b board is possible, but an error was detected.

- Check that the board is installed correctly. If the message appears again, contact your sales or service representative.
- See p.33 "Attaching IEEE 802.11b Interface Unit".

Hardware Problem Wireless Card

Access to the IEEE 802.11b interface unit is possible, but an error was detected.

9

IEEE 802.11b card access failure.

- Turn the power off, and then on. Remove and re-install the IEEE 802.11b interface unit or interface unit correctly. If the message appears again, contact your sales or service representative.
- See p.33 "Attaching IEEE 802.11b Interface Unit".

Invalid Password Try again

The invalid password was entered and Locked or Stored Print is incorrect.

- Enter the correct password.

Irregular Toner

Irregular toner is set.

- Replace the toner to appropriate one.

Load Correct Size Paper/Paper Size: Paper Type: Press # to continue/Paper Size: Paper Type:

The paper size setting on the tray differs from that of actual paper size in the tray.

- Change the paper size of the tray where the error has occurred using dial or press the [Form Feed] key. Printing will start again after pressing the [# Enter] key.
- See p.85 "Loading Paper".

Load Paper:Tray# or Form Feed

No paper remaining in the indicated tray.

- Load the indicated tray with the paper or select another tray using the [Form Feed] key, or cancel the job.

Menu Protected Cannot change

The control panel has been digitally locked, and settings cannot be changed.

- This alert message is displayed for 3 seconds before returning to the previous display screen.

No Files exist

There are no files available for deleting or printing.

- Check the error list to identify the files unavailable for printing.

P=XX I=XXXXXXXX Power Off On/Call Service if error reoccurs

Controller error. The SC number indicates the problem.

- Turn the power off, and then on. If the message appears again, contact your sales or service representative. Report the error code that appears.

Proxy setting or connection error

Proxy address port No. is invalid. Proxy is not active. Invalid center URL is set. Center is not active. Proxy is not set.

- Check the proxy settings.

Proxy User Name/Password error

Proxy user name and password are incorrect.

- Change the current user name and password to the correct user name and password.

RC Gate connection error

The printer cannot communicate with Remote Communication Gate.

- Contact your sales or service representative.

Remove Misfeed Duplex Unit/Open Duplex Unit Cover

Paper is jammed in the duplex unit.

- Remove and re-install the duplex unit. Remove any jammed paper from the duplex unit and under the rear cover.
- See p.167 "Removing Misfed Paper".

Remove Misfeed Internal Path/Open Front Cover

Paper is jammed in the internal paper feed path.

- Open the front cover and remove jammed paper.
- See p.167 "Removing Misfed Paper".

Remove Misfeed Paper Tray/Pull out Tray

Paper is jammed in the specified input paper tray.

- Remove paper from the input paper tray and then reload paper. Then open the front cover and then close it again, so the error message disappears.
- See p.167 "Removing Misfed Paper".

Remove Misfeed Paper Exit Cover/Open Paper Exit Cover

Paper is jammed under the paper exit cover.

- Open the front and rear cover and remove jammed paper.
- See p.167 "Removing Misfed Paper".

Remove Paper Standard Tray

The standard output tray is full.

- Remove the paper from the standard output tray.

Replace Print Cartridge

It is time to replace the waste toner.

The printer is out of toner.

- Replace the toner cartridge.
- See p.107 "Replacing the Toner Cartridge (Print Cartridge)".

Replace Print Cartridge soon

The printer is almost out of toner.

- Prepare a new toner Cartridge.

Reset Fusing Unit correctly

The fusing unit is not set correctly or is not set, or your fusing unit is improper.

- Set the fusing unit correctly, or set the proper fusing unit.
- See p.112 "Replacing the Maintenance Kit".

Reset the Job or Form Feed/Paper Size: Paper Type:

The printer detected that the actual paper type and size are not the same as the paper tray size setting and the paper type setting.

- Load the indicated tray with the correct paper or change the paper type/size using dial or via the special paper size setting menu on the control panel. Or otherwise, execute Form Feed by pressing the [Form Feed] key, or cancel the job.

Reset Print Cartridge

The toner cartridge is not set correctly or not installed.

- Set the toner cartridge correctly. If the cartridge is installed, close the front cover and turn the power switch to off and to on. If the message appears again, contact your sales or service representative.
- See p.107 "Replacing the Toner Cartridge (Print Cartridge)".

Reset Tray # or Form Feed

The indicated paper input tray is not set correctly, or is not set.

- Set the indicated paper input tray correctly.

SC XXX-X Power Off On/Call Service if error reoccurs

The Service Code or SC number indicates the problem.

- Turn the power off, and then on. If the message appears again, contact your sales or service representative. Report the error code that appears.

SD authenticatn. Failed

Authentication from the SD card has failed.

- Turn the power off, and then on. If the message appears again, contact your sales or service representative.

SSID not entered

Wireless LAN's SSID is not entered.

- Enter the SSID of the wireless LAN.
- See p.61 "IEEE 802.11b (Wireless LAN) Configuration".

Supply order failed

Call for supply order has failed.

- Contact your sales or service representative.

Panel Tone

The following table explains the meaning of the various beep patterns that the printer alerts to users about its conditions.

Beep pattern	Meaning	Cause
Two long beeps.	Printer has warmed up.	After cooling or being switched on, the printer has fully warmed up and is ready for use.
Single short beep.	Panel/ screen input accepted.	A control panel or screen key was pressed. Single short beeps are produced only when valid keys are pressed.
Single long beep.	Job completed.	A Printer/ Document Server Features job has finished.
Five long beeps.	Soft alert.	The screen is changing back to the initial screen after the printer came out of the energy-saving mode or was reset.
Five short beeps repeated five time.	Strong alert.	Printer requires user attention. Paper might have jammed or toner might need replenishing.

🔽Note

- Users cannot mute the printer's beep alerts. When the printer beeps to alert users of a paper jam or toner request, if the printer's covers are opened and closed repeatedly within a short space of time, the beep alert might continue, even after normal status has resumed.

Printer Does Not Print

Is the power on?

Confirm that the cable is securely plugged into the power outlet and the printer.

Turn on the power.

Does the Online indicator stay on?

If not, press the [Online] key to light it.

Does the Alert indicator stay red?

If so, check the error message on the display and take the required action.

Is the paper set?

Load paper into the paper tray or onto the bypass tray.

See p.85 "Loading Paper".

Can you print a configuration page?

If you cannot print a configuration page, it probably indicates a printer malfunction. Contact your sales or service representative.

See "Printing the Test Page", Quick Installation Guide.

Is the interface cable connected securely to the printer and the computer?

Connect the interface cable securely. If it has a fastener, fasten it securely as well.

Are you using the correct interface cable?

The type of interface cable you should use depends on the computer you use. Be sure to use the correct one.

If the cable is damaged or worn, replace it with a new one.

See p.189 "Specifications".

Is the Data In indicator blinking or lit after starting the print job?

If not blinking or lit, the data is not being sent to the printer.

If the printer is connected to the computer using the interface cable

> Check if the port connection setting is correct. For details about checking the port connection, see p.154 "Checking the Port Connection".

Network Connection

> Contact your network administrator.

How is the signal strength when using the wireless LAN?

Ad hoc Mode or 802.11 Ad hoc Mode

Either move to a location where the signal is good, or remove obstructions.

Infrastructure Mode

Check the signal status from the [Maintenance] menu on the control panel. If the signal is poor, either move to a location where it is good, or remove obstructions.

Checking the Port Connection

When the printer is directly connected via the PC cable and the data-in indicator does not flash or light up, the method of checking the port connection is as follows.

- For a parallel port connection, port LPT 1 or LPT 2 should be set.

- For a USB port connection, port USB00 (n) [1] should be set.

[1] (n) is the number of printers connected.

For Windows 95/98/Me:

1. **On the [Start] menu, point to [Settings], and then click [Printers].**
2. **Click to select the icon of the printer. Next, on the [File] menu, click [Properties].**
3. **Click the [Details] tab.**
4. **Check the [Print to the following port] box to confirm that the correct port is selected.**

⬇ Note

- Due to the termination of support for Windows 95/98 by Microsoft, the supplier does not guarantee any problem/change occur.

For Windows 2000:

1. **On the [Start] menu, point to [Settings], and then click [Printers].**
2. **Click to select the icon of the printer. Next, on the [File] menu, click [Properties].**
3. **Click the [Port] tab.**
4. **Check the [Print to the following port] box to confirm that the correct port is selected.**

For Windows XP Professional, Windows Server 2003/2003 R2:

1. **On the [Start] menu, click [Printers and Faxes].**
2. **Click to select the icon of the printer. Next, on the [File] menu, click [Properties].**
3. **Click the [Port] tab.**
4. **Check the [Print to the following port(s).] box to confirm that the correct port is selected.**

9

For Windows XP Home Edition:

1. On the [Start] menu, click [Control Panel].
2. Click [Printers and Other Hardware].
3. Click [Printers and Faxes].
4. Click to select the icon of the printer. Next, on the [File] menu, click [Properties].
5. Click the [Port] tab.
6. Check the [Print to the following port(s).] box to confirm that the correct port is selected.

9

Other Printing Problems

When You Cannot Print Properly

▌ Toner smears appear on the print side of the page.

The paper setting may not be correct. For example, although you are using thick paper, the setting for thick paper may not be set.

- Check the paper settings.

  See p.78 "Types of Paper and Other Media".

- Check the printer driver's paper settings.

  See the printer driver Help.

Confirm that the paper is not curled or bent. Envelopes can be curled easily. Flatten paper before loading.

See p.75 "Paper and Other Media Supported by This Printer".

▌ Photo images are coarse.

Some applications lower the resolution for making prints.

▌ Fine dot pattern does not print.

Change the [Dithering:] setting in the printer driver's dialog box.

See the printer driver Help.

▌ Solid lines are printed as broken lines.

Change the [Dithering:] setting in the printer driver's dialog box.

See the printer driver Help.

▌ The print out image is missing or partially blurred.

- Paper is damp. Use paper that has been stored properly.

  See p.78 "Storing Paper".

- Toner is almost depleted. When the "Replace Print Cartridge soon" message appears on the display, replace the toner cartridge.

  See p.107 "Replacing the Toner Cartridge (Print Cartridge)".

- Condensation may have collected. If rapid change in temperature or humidity occurs, use this printer only after it has acclimatized.

▌ The whole printout is blurred.

- Paper is damp. Use paper that has been stored properly.

  See p.78 "Storing Paper".

- If you select [Toner saving] on the [Print Quality] tab in the printer properties dialog box, printing is generally less dense.

  See the printer driver Help.

- Toner is almost depleted. When the "Replace Print Cartridge" message appears on the display, replace the toner cartridge.

  See p.107 "Replacing the Toner Cartridge (Print Cartridge)".

- Condensation may have collected. If rapid change in temperature or humidity occurs, use this printer only after it has acclimatized.

White streaks appear.

- Toner is almost depleted. When the "Replace Print Cartridge" message appears on the display, replace the toner cartridge.

  See p.107 "Replacing the Toner Cartridge (Print Cartridge)".

The backs of printed sheets are blemished.

- When removing a jammed sheet, the inside of the printer may have become dirtied. Print several sheets until they come out clean.

- If document size is larger than paper size, e.g. A4 document on B5 paper, the back of the next printed sheet may be dirtied.

If rubbed with your finger, it smears out.

The setting of the paper may not be correct. For example, although thick paper is used, the setting for thick paper may not be set.

- Check the paper settings of this printer.

  See p.78 "Types of Paper and Other Media".

- Check the paper settings of the printer driver.

  See the printer driver Help.

The fusing unit is deteriorated or damaged. Replace the unit.

For replacing the unit, Maintenance Kit (optional) is required.

When printing on OHP transparencies, black or white dots are obvious.

The registration roller is dirty. Clean the registration roller. Contact your sales/service representatives.

Image quality varies when printing on thick paper or on OHP transparencies.

Switch to Thick Paper mode.

See "Making Printer Settings Using Control Panel", Software Guide.

When printing on plain paper, white dots are obvious.

The registration roller is dirty. Clean the registration roller. Contact your sales/service representatives.

9

Paper Misfeeds Occur Frequently

Paper jams occur frequently.

- Number of paper set in the tray exceeds the limit. Confirm that the top of the stack is not higher than the limit mark inside the tray.

  See p.85 "Loading Paper".

- There may be a gap between the guides and the paper in the paper tray. Make sure there are no gaps.

  See p.85 "Loading Paper".

- Paper is either too thick or too thin.

  See p.75 "Paper and Other Media Supported by This Printer".

- Paper is bent or wrinkled. Use paper that have no bents or wrinkles.

  See p.75 "Paper and Other Media Supported by This Printer".

- Paper has already been printed on.

  See p.75 "Paper and Other Media Supported by This Printer".

- Paper is damp. Use paper that has been stored properly.

  See p.75 "Paper and Other Media Supported by This Printer".

- When loading paper, separate paper from each other.

Multiple pages are fed at once.

- There may be a gap between the guides and the paper in the paper tray. Make sure there are no gaps.

  See p.85 "Loading Paper".

- Paper is either too thick or too thin.

  See p.75 "Paper and Other Media Supported by This Printer".

- Paper has already been printed on.

  See p.75 "Paper and Other Media Supported by This Printer".

- Number of paper set in the tray exceeds the limit. Confirm that the top of the stack is not higher than the limit mark inside the tray.

  See p.75 "Paper and Other Media Supported by This Printer".

- Paper is static. Use paper that has been stored properly.

  See p.75 "Paper and Other Media Supported by This Printer".

- When loading paper, separate paper from each other.

Paper gets wrinkles.

- Paper is damp. Use paper that has been stored properly.

See p.78 "Storing Paper".

- Paper is too thin.

    See p.78 "Types of Paper and Other Media".

- There may be a gap between the guides and the paper in the paper tray. Make sure there are no gaps.

    See p.85 "Loading Paper".

- The fusing unit is deteriorated or damaged. Replace the unit. For replacing the unit, Maintenance Kit (optional) is required.

The printed image is different from the image on the computer

A printed image is different from the image on the computer's display.

- When you use some functions, such as enlargement and reduction, the layout of the image might be different from that displayed in the computer display.

- You might have selected to replace True Type fonts with printer fonts in the printing process.

    To print an image similar to the image on the computer, make the settings to print out True Type fonts as an image.

    See the printer driver Help.

The image is printed in the wrong orientation.

Set the correct orientation under the [PCL Menu] with the control panel. See "Making Printer Settings Using the Control Panel", Software Guide.

Confirm that the setting of orientation has been set in the application you use.

Set the correct paper size and feed direction that matches tray settings on the RPCS printer driver.

Images are cut off, or excess pages are printed.

If you are using paper smaller than the paper size selected in the application, use the same size paper as that selected in the application. If you cannot load paper of the correct size, use the reduction function to reduce the image, and then print.

See the printer driver Help.

Nothing is printed on the paper.

Check if the tape of the toner cartridge is completely removed. Be sure to remove the tape completely when replacing the toner cartridge. If the power switch is turned on with the tape still attached to the toner cartridge, the printer might be damaged.

See p.107 "Replacing the Toner Cartridge (Print Cartridge)".

9

PDF Direct Print is not executed (PDF file is not printed).

- You must install an optional hard disk drive or set the value of the [RAM Disk] in the [System] menu to 2 MB or higher.

  See p.27 "Attaching Hard Disk Drive Type 2650", for optional hard disk drive installation.

  For [RAM Disk], see the "System Menu", Software Guide.

- After adding a memory unit and set the value of the [RAM Disk] in the [System] menu to 16 MB, value of the [RAM Disk] returns to 0 MB if the memory unit is removed. If this happens, reset the value of the [RAM Disk] to 2 MB or higher.

  For [RAM Disk], see the "System Menu", Software Guide.

- When printing a PDF with a password set, set the password of the PDF file using the [PDF: Change PW] menu in the [PDF Menu] or Web Image Monitor.

  For [PDF: Change PW], see the "PDF Menu", Software Guide.

  For Web Image Monitor, see Web Image Monitor Help.

- PDF files not allowed to be printed by the PDF file security setting cannot be printed.

As a result of printing using PDF Direct Printing, characters are missing or misshapen.

Before printing, embed the font in the PDF file to be printed.

A portion of the image is not printed or an error occurred in the PostScript printer driver when printing with PCL or the PostScript printer driver.

You can print using the procedure below.

- Set [Memory Usage] in the [System] menu to [Font Priority] on the control panel.
- Return the setting to [Font Priority] after you have finished printing. If the setting is left as [Font Priority], continuous printing speed may decrease, two-sided printing may be canceled or a job reset may occur during continuous printing.

If the entire image is not printed out properly even after changing the above setting, add an additional memory unit.

The paper size appears on the control panel and printing is not performed with PDF Direct Print.

When using PDF Direct Print, printout requires paper set within the PDF file. When a message indicating a paper size appears, either place the indicated size in the paper tray, or perform Form Feed.

Also, if [Sub Paper Size] in the [System] menu is set to [Auto], printing is performed assuming letter size and A4 size to be the same size. For example, When a PDF file set to A4 size paper is printed using PDF Direct Print and letter size paper is installed in the paper tray, the file will print out. This applies similarly to the opposite case.

If the problem cannot be solved, contact your sales or service representative.

When Printer is Not Functioning Properly

Paper is not fed from the selected tray.

When you are using a Windows operating system, the printer driver settings override those set using the control panel. Set the desired input tray using the printer driver.

See the printer driver Help.

It takes too much time to turn on the printer.

If the printer is turned off while it is still accessing the hard disk (for example: during file deletion), the printer will require more time to power-up the next time it is turned on. To avoid this time delay, do not turn the power off while it is in operation.

It takes too much time to resume printing.

- Large or complex data takes long time for the printer to process. If the **Data In** indicator is blinking, the data is being processed. Just wait until it resumes.

- If OHP transparencies is in use, printing takes more time to start.

- The printer was in the Energy Saver mode. To resume from the Energy Saver mode, the printer has to warm up, and this takes time until printing starts. To disable the Energy Saver mode, select [Off] for [Energy Saver] in the [System] menu.

- Changing the paper feed direction may sometimes reduce the time to resume printing.

It takes too much time to complete the print job.

- Photographs and other data intensive pages take a long time for the printer to process, so simply wait when printing such data.

  Changing the settings with printer driver may help to speed up printing.

  See the printer driver Help.

- Large or complex data takes long time for the printer to process. If the **Data In** indicator is blinking, the data is being processed. Just wait until it resumes.

- If "Waiting..." appears on the display, the printer is now warming up. Wait for a while.

Network configurations you have made do not become effective.

Print a configuration page and check the network settings.

The control panel error message stays on after removing the misfed paper.

Open the front cover of the printer and then close it.

See p.167 "Removing Misfed Paper".

9

Additional Troubleshooting

Strange noise is heard.

If a supply was recently replaced or an option attached in the area the strange noise is coming from, check the supply or option is properly attached. If the strange noise persists, contact your sales or service representative.

No e-mail is received when an Alert occurs, and after resolving an Alert.

- Confirm [Auto Email Ntfy] is [On] using the [System] menu on the Control Panel. See "System Menu", Software Guide.

- Access the printer through the Web browser, log on as an administrator on the Web Image Monitor, and then confirm the following settings in "Auto E-mail Notification":
    - Device E-mail Address
    - Groups to Notify
    - Select Groups/Items to Notify
  For details about the settings, see Web Image Monitor Help.

- Access the printer through the Web browser, log on as an administrator on the Web Image Monitor, and then confirm the settings of the SMTP server in "E-mail".
  For details about the settings, see Web Image Monitor Help.

- When the power is turned off before the e-mail is transmitted, the e-mail will not be received.

- Check the e-mail address set for the destination. Confirm the printer's operation history using the Web Image Monitor's System Log menu in "Network". If the e-mail was sent but not received, the destination may be incorrect. Also check the information concerning error mail from the e-mail server.

The setting for Notify by Email on the System Menu was changed from Off to On, but e-mail is not arriving.

After changing the setting, turn the printer's power off and then back on again.

Error notification e-mail was received, but no error-solved e-mail is received.

Check e-mail is set for sending using the Web Image Monitor's "Auto E-mail Notification" at the time the error was fixed. You must click the [Edit] button of [Detailed Settings of Each Item] in "Auto E-mail Notification", and set [Notify when error:] to [Occurs & Fixed] on the displayed screen.

For details about the settings, see Web Image Monitor Help.

Alert Resolving is set for sending e-mail, but no Alert-resolved e-mail is sent.

If the power of the main unit is turned off after an Alert occurs, the Alert is resolved during the time the power is off: no Alert-resolved e-mail is sent.

Alert Occurrence and Alert Resolving are set for sending e-mail, but while no Alert Occurrence mail is received, Alert-resolved e-mail is received.

Alert-notification e-mail is not sent if the problem is resolved before sending. However, an Alert-resolved e-mail is sent.

Alert-notification level was changed, and e-mail stopped arriving.

If an Alert-notification e-mail arrives in the previous notification level, e-mail will not be sent even if the notification level is changed afterwards.

When no date information is included in sent e-mail, the mail server has a malfunction.

Make the setting for obtaining time information from the SNTP server. Refer to the Web Image Monitor's Help to the settings.

Printing using IEEE 802.11b (wireless LAN) is slow.

When using the optional IEEE 802.11b board, do the following:

- Transmit fewer print jobs.
- Make sure no other IEEE 802.11b (wireless LAN) or Bluetooth devices are in use.

  Interference may occur with the IEEE 802.11b wireless LAN interface board. Such interference may affect the transmission speed and other functions.

- Transmissions between the client computer and the printer can be blocked by obstructions. Move the printer or client computer if necessary.

🔽**Note**
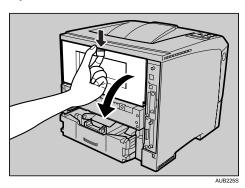
- If the printer is still not operating satisfactorily, contact your sales or service representative. Consult with the store where the printer was purchased for information about the location of sales or service representatives.
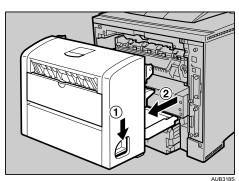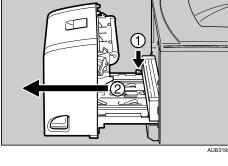
9

Using the Envelope Lever

⚠CAUTION

- The inside of the machine becomes very hot. Do not touch the parts with a "⚠" label (means hot surface). Touching a part with a "⚠" label (means hot surface) could result in a burn.

- The fusing unit becomes very hot. When installing the new fusing unit, turn off the printer and wait about an hour. After that, install the new fusing unit. Not waiting for the unit to cool down can result in a burn.

1. **Open the rear cover.**
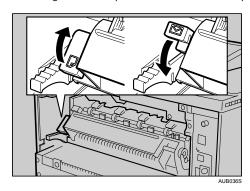
AUB225S

2. **If the optional duplex unit is attached, push down the lever on the right side of the duplex unit (①), and then pull it out until it stops (②).**

AUB318S

3. **Push the under board levers ($\textcircled{1}$) and then pull the duplex unit out of the printer ($\textcircled{2}$).**

AUB319S
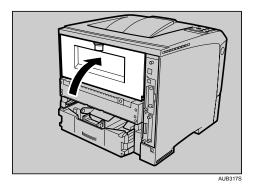
4. **Use the envelope lever.**

   Lowering the envelope lever increases roller pressure.

   AUB036S
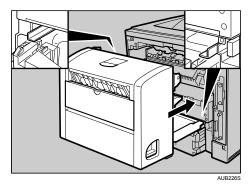
   Keep the envelope lever lowered when printing normally.

5. **Close the rear cover.**

   AUB317S

6. **When the optional duplex unit was removed, push in the duplex unit along the rail in the back of the printer.**

AUB226S
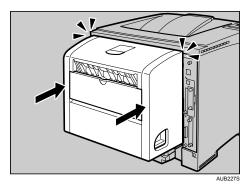
7. **Securely push the duplex unit into the printer.**

AUB227S

9

10. Removing Misfed Paper

Removing Misfed Paper

An error message appears if a paper misfeed occurs. The error message gives the location of the misfeed.

⚠CAUTION

- The inside of the machine becomes very hot. Do not touch the parts with a "⚠" label (means hot surface). Touching a part with a "⚠" label (means hot surface) could result in a burn.

- When pulling the paper tray out, be careful not to pull it strongly. If you do, the tray might fall and cause an injury.

- When removing misfed paper, do not touch the fusing section because it becomes very hot.

- The fusing unit becomes very hot. When installing the new fusing unit, turn off the printer and wait about an hour. After that, install the new fusing unit. Not waiting for the unit to cool down can result in a burn.

⭐Important

- Misfed paper may be covered in toner. Be careful not to get toner on your hands or clothes.

- Toner on prints made after removing misfed paper may be loose (inadequately fused). Make a few test prints until smudges no longer appear.

- Do not forcefully remove misfed paper, it will tear. Torn pieces remaining inside the printer will cause further misfeeds and possibly damage the printer.

- More than one misfed area might be indicated. In this case, check every applicable area.

- If paper continues to misfeed, check the following points.
  - Confirm that the setting of the paper size dial matches the size and feed direction of the paper loaded in the paper tray.
  - Confirm that the toner cartridge is set correctly.

- If paper misfeeds still occur, contact your sales or service representative.

- Do not leave any torn paper scraps within the printer.
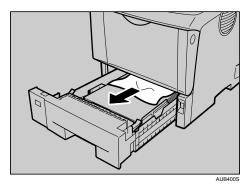
When "Remove Misfeed Paper Tray" Appears
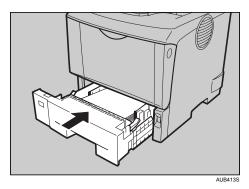
⭐Important

- Forcefully removing misfed paper may cause paper to tear and leave scraps of paper in the printer. This might cause a misfeed and damage the printer.
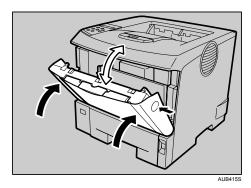
1. **Pull out the paper tray until it stops, and then remove misfed paper.**

AUB400S

2. **Carefully slide the paper tray into the printer until it stops.**

AUB413S

3. **Open the front cover by pushing the front cover release button, and then close it to reset the misfeed condition.**

AUB415S

↓ Note
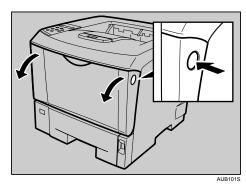
- You can apply this procedure for both the paper tray and the optional paper feed unit.

- To reset the misfeed condition, open and close the front cover, then the indicator will be off.
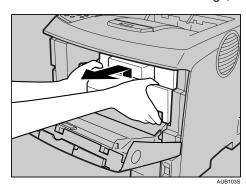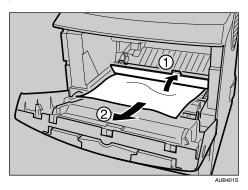
When "Remove Misfeed Internal Path" Appears

⭐ **Important**

- Forcefully removing misfed paper may cause paper to tear and leave scraps of paper in the printer. This might cause a misfeed and damage the printer.

- If paper is fed from the Bypass Tray, be sure to remove all the paper from the Bypass Tray and close it before opening the front cover.

- Be sure to put the toner cartridge on a stable, flat surface.

- Do not hold the toner cartridge upside down or stand it vertically.

1. **Open the front cover by pushing the front cover release button.**
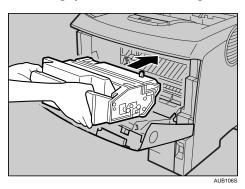
AUB101S

2. **Lift the front side of the toner cartridge, and then pull it out of the printer.**

AUB103S

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3. **Pull out the misfed paper by holding both sides of paper. Be careful not to get toner dust on your hands or clothes.**

AUB401S
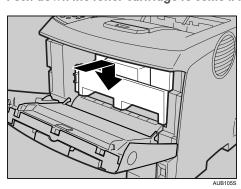
4. **Hold the grips of the toner cartridge, and then push it into the printer until it stops.**
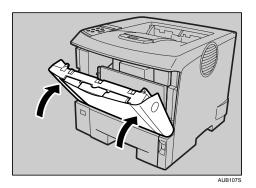
AUB106S

5. **Push down the toner cartridge to settle it in appropriate position.**

AUB105S

6. **Close the front cover.**

AUB107S
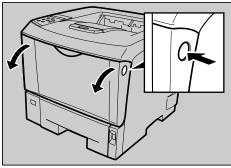
When "Remove Misfeed Paper Exit Cover" Appears

⭐**Important**
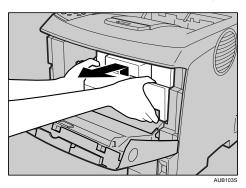
- Forcefully removing misfed paper may cause paper to tear and leave scraps of paper in the printer. This might cause a misfeed and damage the printer.

- Be sure to put the toner cartridge on a stable, flat surface.

- Do not hold the toner cartridge upside down or stand it vertically.

- If paper is fed from the Bypass Tray, be sure to remove all the paper from the Bypass Tray and close it before opening the front cover.

Removing misfed paper from the internal path

1. **Open the front cover by pushing the front cover release button.**

AUB101S

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2. Lift the front side of the toner cartridge, and then pull it out of the printer.

AUB103S

3. Pull out the misfed paper by holding both sides of paper. Be careful not to get toner dust on your hands or clothes.

AUB401S

4. Hold the grips of the toner cartridge, push it into the printer until it stops.

AUB106S

5. **Push down the toner cartridge to settle it in appropriate position.**

AUB105S

6. **Close the front cover.**

AUB107S
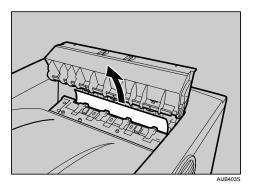
Removing misfed paper from the exit cover

1. **Open the paper exit cover.**
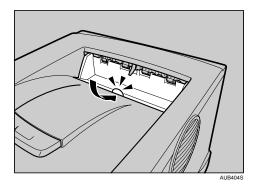
   Place your finger under the indentation in the exit cover, raise it ($①$) and pull it backward to open it ($②$).

AUB402S

2. **Remove the misfed paper.**

AUB403S
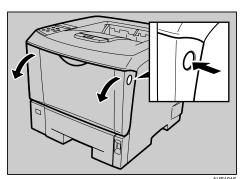
3. **Close the paper exit cover until it clicks.**

AUB404S
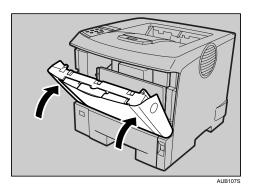
4. **Open the front cover by pushing the front cover release button.**

AUB101S

5. **Close the front cover.**

AUB107S

Note
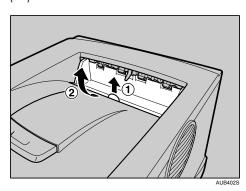
- Once all misfed paper is removed, the error message will disappear and printing will continue.

Removing misfed paper from the fusing unit
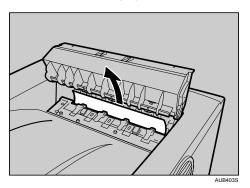
If the error message is still displayed, check the inside of the fusing unit and remove any paper inside. Turn off the power and wait for about an hour before turning it back on.

Important

- Do not touch the metal part of the fusing unit. It becomes very hot. Touching it could result in a burn.

1. **Open the paper exit cover.**
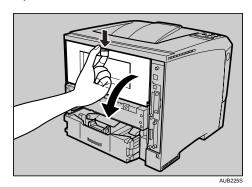
   Place your finger under the indentation in the exit cover, raise it ($①$) and pull it backward to open it ($②$).

AUB402S

2. **Remove the misfed paper.**

AUB403S

3. **Open the rear cover.**
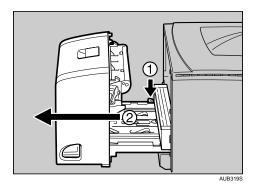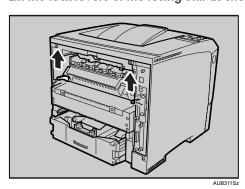
AUB225S

4. **Lower the rear cover until it is horizontal, and then pull it away.**

AUB234S

5. **If the optional duplex unit is attached, push down the lever on the right side of the duplex unit ($①$), and then pull it out until it stops ($②$).**

AUB318S

6. **Push the under board levers ($①$) and then pull the duplex unit out of the printer ($②$).**

AUB319S
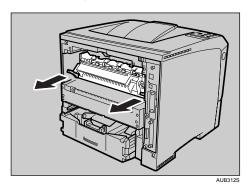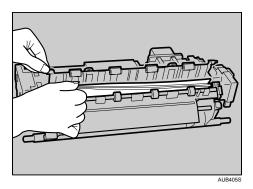
7. **Lift the lock levers of the fusing unit as shown in the illustration.**

AUB311Sz

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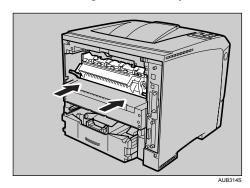
8. **Pull the fusing unit out.**

AUB312S
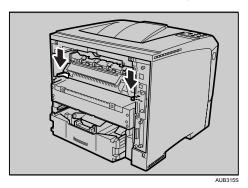
9. **Hold the tab, and then remove the misfed paper.**

AUB405S

10. **Push the fusing unit until it stops.**

AUB314S

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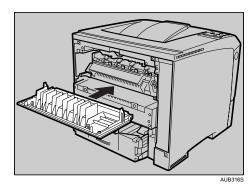
11. **Push the lock levers of the fusing unit down until they click.**

AUB315S
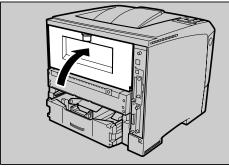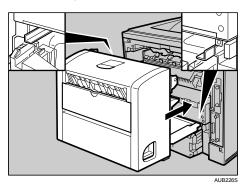
Proceed to step 13 if the optional duplex unit is installed.

12. **Position the rear cover horizontally and align it with the grooves in the printer's interior.**
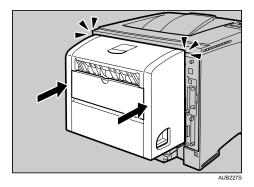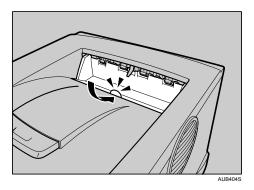

AUB316S

13. **Close the rear cover.**

AUB317S

14. When the optional duplex unit was removed, push in the duplex unit along the rail in the back of the printer.

AUB226S

15. Securely push the duplex unit into the printer.

AUB227S

16. Close the paper exit cover until it clicks.

AUB404S

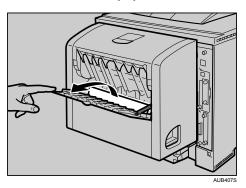**17.** Turn the power on.
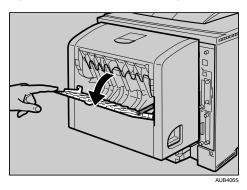
When "Remove Misfeed Duplex Unit" Appears

⭐ **Important**

- Forcefully removing misfed paper may cause paper to tear and leave scraps of paper in the duplex unit. This might cause a misfeed and damage the printer.
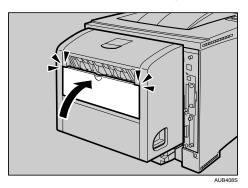
Removing misfed paper inside the cover
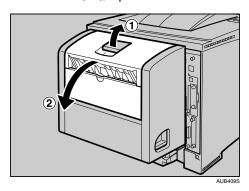
1. **Open the rear cover of the duplex unit.**
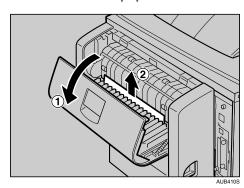

AUB406S

2. **Remove the misfed paper.**

AUB407S

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3. **Close the rear cover of the duplex unit.**

AUB408S
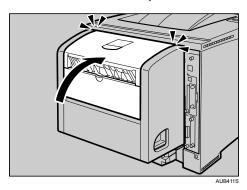
4. **Lift the lever (①), open the cover of the duplex unit (②).**

AUB409S

5. **Remove the misfed paper.**

AUB410S
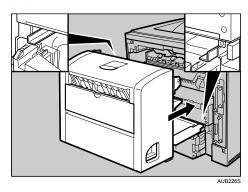
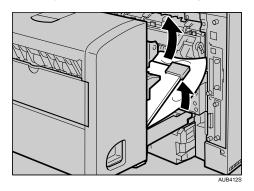6. **Close the cover of the duplex unit.**

AUB411S

Removing misfed paper inside the duplex unit
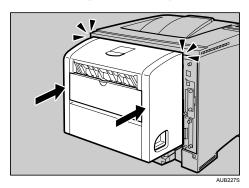
⭐**Important**

- When A5▱ paper misfeeds, you might not be able to remove it by pulling the duplex unit out. In this case, pull the paper tray out and remove the paper.

1. **Push down the lever on the right side of the duplex unit (①), and then pull it out until it stops (②).**

AUB226S

2. **Lift the guide board inside the duplex unit, and remove the misfed paper.**

AUB412S

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3. **Push in the duplex unit along the rails in the back of the printer.**

AUB227S

⬇ Note

- If the error message appears again, the misfed paper might be left in the printer. Confirm that any torn paper scraps are not in the inside of the printer. For more information, see "When Remove Misfeed Internal Path Appears".

🗐 Reference

- p.169 "When "Remove Misfeed Internal Path" Appears"

10

11. Appendix

Moving and Transporting the Printer

⚠ CAUTION

- When you move the printer, remember to unplug the power cord from the wall outlet to avoid a fire or an electric shock.

- When you pull out the plug from the socket, grip the plug, not the cord, to avoid damaging the cord and causing a fire or an electric shock.

⭐ **Important**

- **Repack the printer in its original packing materials for transporting.**

- **Be sure to disconnect all cables from the printer before transporting it.**

- **The printer is a precision piece of machinery. Take care to avoid damage during shipment.**

- **If the optional paper feed unit is installed, remove it from the printer, and then move them separately.**

🔽 **Note**

- The printer weighs approximately 17 kg (37.5 lb.).
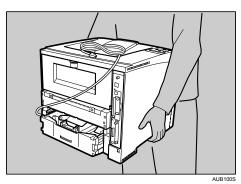
Moving the Printer

⚠ CAUTION

- When lifting the machine, use the inset grips on both sides. Otherwise the printer could break or cause an injury if dropped.

- Before moving the machine, unplug the power cord from the wall outlet. If the cord is unplugged abruptly, it could become damaged. Damaged plugs or cords can cause an electrical or fire hazard.

Moving the printer in a short distance

1. **Be sure to check the following points:**
   - The power switch is turned off.
   - The power cable is unplugged from the wall outlet.
   - The interface cable is unplugged from the printer.

2. **If the external options are installed, remove them.**

11

3. **Lift the printer by using the inset grips on both side of the printer, and then move it horizontally to the place where you want to install it.**

AUB100S

4. **If you removed options, move them separately and reinstall them.**

⬇Note

- Be sure to move the printer horizontally. To prevent toner from scattering, move the printer slowly.

Consumables

⭐ **Important**

- Our products are engineered to meet the highest standards of quality and functionality. When purchasing expendable supplies, we recommend using only those specified by an authorized dealer.

Toner Cartridge (Print Cartridge)

Toner cartridge	Average printable number of pages per cartridge
Black	15,000 pages

⬇ **Note**

- The toner cartridge packaged with the printer can print up to 6,000 pages when it is compliant with ISO/IEC 19752 and the image density is set as the factory default. ISO/IEC 19752 is an international standard on measurement of printable pages, set by the International Organization for Standardization.

- If toner cartridges are not changed when necessary, printing will become impossible. We recommend keeping a stock of cartridges or purchasing them soon.

- The actual number of printable pages varies depending on the image volume and density, number of pages to be printed at a time, paper type and paper size used, and environmental conditions such as temperature and humidity.

- Toner cartridges may need to be changed sooner than indicated above due to deterioration over the period of use.

- Toner cartridges (consumables) are not covered by warranty. However, if there is problem, contact the store where they were purchased.

- When you first use this printer, use the toner cartridge packaged with the printer.

- Numbers of pages that can be printed using the toner cartridge supplied with this printer are as follows:

Name	Average printable number of pages
Print Cartridge	6,000 pages

11

Maintenance Kit

Maintenance Kit SP 4100

Name	Average printable number of pages
Paper Feed Roller × 3	90,000 pages
Fusing Unit	90,000 pages
Transfer Roller	90,000 pages
Friction Pad × 3	90,000 pages

↓Note

- The actual number of printable pages varies depending on the image volume and density, number of pages to be printed at a time, paper type and paper size used, and environmental conditions such as temperature and humidity.

- The maintenance kit (consumables) are not covered by warranty. However, if there is problem, contact the store where they were purchased.

11

Specifications

Mainframe

Configuration:

Desktop

Print Process:

Laser beam scanning & Electrophotographic printing

Dual cmponent development

First Print Speed:

7.5 sec or less (A4⬙, $8^1/_2$×11⬙)

Printing Speed:

31 ppm model

- Maximum 31 pages per minute (A4⬙, $8^1/_2$×11⬙)

36 ppm model

- Maximum 36 pages per minute (A4⬙, $8^1/_2$×11⬙)

Resolution:

1,200 × 600 dpi (RPCS, PostScript 3, PCL 6)

600 × 600 dpi (RPCS, PostScript 3, PCL 5e/6)

300 × 300 dpi (RPCS, PostScript 3, PCL 5e)

Paper size:

See p.75 "Paper and Other Media Supported by This Printer".

Paper Weight:

See p.75 "Paper and Other Media Supported by This Printer".

Media Type:

See p.78 "Types of Paper and Other Media".

Paper Output Capacity:

Standard 250 sheets (80 g/m^2, 20 lb.)

Paper Input Capacity:

Standard Paper Tray	500 sheets [1]
Bypass Tray [2]	100 sheets [1]
Optional Paper Feed Unit	500 sheets × 2 [1]

11

Optional Envelop Feeder Unit [*3]	60 sheets [*1]

[*1] Paper weight: 60 - 130 g/m^2 (16 - 34 lb.)

[*2] You can load up to 10 envelopes (55 - 157 g/m^2, 14 - 42 lb.) at the same time.

[*3] To use the envelope feeder unit, the optional paper feed unit is required. The paper tray of the feed unit can be replaced with the envelope feeder unit. For more information about envelopes, see p.78 "Types of Paper and Other Media".

Power Source:

220-240V

220 - 240 V, 4.3 A or more, 50/60 Hz

120V

120 V, 8 A or more, 60 Hz

Power Consumption:

220-240V

	Mainframe	With full options
Printing	970 W or less	990 W or less
Energy Saver	4.5 W or less	9 W or less

120V

	Mainframe	With full options
Printing	930 W or less	960 W or less
Energy Saver	4.5 W or less	7 W or less

Dimensions:

	Width	Depth	Height
Printer only (Bypass Tray not extended)	388 mm (15.2 ")	450 mm (17.7 ")	345 mm (13.6 ")
Printer only (Bypass Tray extended)	388 mm (15.2 ")	508 mm (20.0 ")	345 mm (13.6 ")
Printer with paper feed unit (one optional)	388 mm (15.2 ")	450 mm (17.7 ")	480 mm (18.8 ")

	Width	Depth	Height
Printer with two optional paper feed unit	388 mm (15.2 ")	450 mm (17.7 ")	615 mm (24.2 ")

Weight:

Approximately 17 kg (37.5 lb) (power cord included)

Noise Emission [1] **:**

Sound Power Level : Main frame only

	31ppm model printer	36ppm model printer
Stand-by	42 dB (A)	44 dB (A)
During Printing	65 dB (A)	67 dB (A)

Sound Pressure level : Main frame only [2]

	31 ppm model printer	36 ppm model printer
Stand-by	36 dB (A)	38 dB (A)
During Printing	59 dB (A)	61 dB (A)

[1] The preceding measurements made in accordance with ISO7779 are actual values.

[2] Measured at the position of a bystander.

Memory:

Standard 192 MB, up to 384 MB (with the optional Memory Unit)

Interface:

Standard:

- Ethernet (10/100Base-TX)
- USB2.0

  It requires a USB computer port and cable that support USB2.0.

- Parallel (Bidirectional IEEE1284)

Optional:

- IEEE 802.11b (Wireless LAN)
- Gigabit Ethernet board

11

191

Printer Language:

RPCS, PCL 5e/6, PostScript Level 3, PDF

Fonts:

PCL 5e/6

- Monotype Imaging 35 Intellifonts, 10 TrueType fonts, 13 International fonts, and 1 Bitmap font.

PostScript 3, PDF

- 136 fonts (Type 2:24, Type 14:112)

Note

- If the printer has not been used for a while, there may be a short delay before the first page starts printing.
- Continuous printing on sheets with a width of 170 mm or smaller may decrease the printing speed depending on the temperature control of the fusing unit.

Options

Paper Feed Unit TK1030

Dimensions (W × D × H):

388 × 486 × 155 mm (15.3 × 19.1 × 5.3 inches)

(Without pins on the unit)

Paper size:

See p.75 "Paper and Other Media Supported by This Printer".

Paper weight:

60 - 130 g/m^2 (17 - 34 lb.)

Note

- Specifications are subject to change without notice.

11

Envelope Feeder Type 400

Dimensions (W×D×H):

359.4 × 427 × 101 mm (14.15 × 16.8 × 3.98 inches)

Paper Weight:

72 - 90 g/m^2 (19 - 24 lb.)

Paper Size:

See p.75 "Paper and Other Media Supported by This Printer".

AD1000 (Duplex Unit)

Dimensions (W×D×H):

305.5 × 336.6 × 216.4 mm (12.0 × 13.3 × 8.5 inches)

Paper Size:

See p.75 "Paper and Other Media Supported by This Printer".

Paper Weight:

60 - 130 g/m^2 (17 - 34 lb.)

Weight:

5 kg (11.0 lb.)

Hard Disk Drive Type 2650

Storage Capacity (Formatted):

40 GB

Specifications:

- Spooling print data to collate
- Storing/Spooling Sample Print/Locked Print/Hold Print/Stored Print data
- Storing PostScript fonts
- Storing log data

↓Note

- You can install PostScript fonts with this optional hard disk drive. With Mac OS, types of fonts supported are PostScript Type 1 and PostScript Type 2. To download them, use Printer Utility for Mac.

Memory Unit Type C 128MB/ 256MB

Module Type:

SO-DIMM (Small Outline Dual-in-line Memory Module)

Memory Type:

SDRAM (Synchronous Dynamic RAM)

Number of Pins:

144 pins

11

IEEE 802.11b Interface Unit Type H

This unit is for the following model: 220-240V

Transmission Spec.:

Based on IEEE 802.11b (Wireless LAN)

Protocol:

IPv4, IPv6, IPX/SPX, AppleTalk

Data Transfer Speed:

Auto select from below speed

1 Mbps, 2 Mbps, 5.5 Mbps, 11 Mbps

Frequency Range:

- Inch version:

  2412-2462 MHz (1-11 channels)

- Metric version:

  2412-2472 MHz (1-13 channels)

Transmittable Distance:

1 Mbps 400 m [1]

2 Mbps 270 m [1]

5.5 Mbps 200 m [1]

11 Mbps 140 m [1]

[1] These figures are a guideline for outdoor use. In general, the transmittable distance indoors is 10-100 m, depending on the environment.

Transmission Mode:

ad hoc mode and infrastructure mode

Note

- SmartDeviceMonitor and Web Image Monitor are supported.

IEEE 802.11b Interface Unit Type I

This unit is for the following model: 120V

Transmission Spec.:

Based on IEEE 802.11b (Wireless LAN)

Protocol:

IPv4, IPv6, IPX/SPX, AppleTalk

Data Transfer Speed:

Auto select from below speed

1 Mbps, 2 Mbps, 5.5 Mbps, 11 Mbps

Frequency Range:

- Inch version:

2412-2464 MHz (1-11 channels)

- Metric version:

2412-2472 MHz (1-13 channels)

Transmittable Distance:

1 Mbps 400 m [1]

2 Mbps 270 m [1]

5.5 Mbps 200 m [1]

11 Mbps 140 m [1]

[1] These figures are a guideline for outdoor use. In general, the transmittable distance indoors is 10-100 m, depending on the environment.

Transmission Mode:

ad hoc mode and infrastructure mode

Note

- SmartDeviceMonitor and Web Image Monitor are supported.

Gigabit Ethernet Board Type A

Interface Connector:

- Ethernet (10Base-T, 100Base-TX, 1000Base-T)

- USB 2.0

It requires a USB computer port and cable that support USB 2.0.

Data Transmission Speed:

- Ethernet: 1000 Mbps, 100 Mbps, 10 Mbps

- USB: 480 Mbps (High speed: USB 2.0), 12 Mbps (Full speed)

Protocol:

TCP/IP, IPX/SPX, AppleTalk

Distance Between Devices:

- Ethernet: 100 m

- USB: 5 m

11

INDEX

MEMO

MEMO

Model No.

MLP31n/MLP36n/P7031n/P7035n/LP131n/LP136n/Aficio SP 4100N/Aficio SP 4110N

EN   USA   G176-8602